IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: Jay S. Walker, Magdelena Mik, Michiko Kobayashi, Geoffrey M. Gelman, Russell Pratt Sammon, and Andrew P. Golden

Application No.: 09/609017 ~~09/632,295~~

Filed: August 3, 2000

For: METHODS AND APPARATUS FOR INCREASING, MONITORING AND/OR REWARDING A PARTY'S COMPLIANCE WITH A SCHEDULE FOR TAKING MEDICINES

Group Art Unit: 3629

Examiner: BORISSOV, Igor N.

APPEAL BRIEF

Attorney Docket No. 00-055

BOARD OF PATENT APPEALS AND INTERFERENCES
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Final Office Action mailed August 12, 2003 (Paper No. 10), rejecting claims **3-14, 26-29 and 34-51**.

TABLE OF CONTENTS

REAL PARTY IN INTEREST

The present application is assigned to Walker Digital, LLC, 1177 High Ridge Road, Suite 128, Stamford, CT 06905.

RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative and Appellants' assignee know of no interferences or appeals that will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims **3-14, 26-29 and 34-51** are pending in the present application, are finally rejected and are being appealed.

Claims **3-14, 34, 35 and 39-51** stand rejected under 35 U.S.C. § 101 as being related to non-statutory subject matter.

Claims **3-14, 26-29, 34-37 and 39-51** (and perhaps, although it is not clear, Claim **38**, i.e., all of the pending claims) stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims **3-14, 26, 27 and 39-42** stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,950,632 issued to Reber et al. ("Reber") in view of U.S. Patent No. 5,757,271 issued to Andrews ("Andrews").

Claims **28, 29, 34-38, 43, 44, 46-48 and 51** stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reber and Andrews in view of U.S. Patent No. 6,151,586 issued to Brown ("Brown")

Claim **45** stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Reber, Andrews, and Brown in view of U.S. Patent No. 5,722,418 issued to Bro ("Bro").

Claims **49 and 50** stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reber, Andrews, and Brown in view of U.S. Patent No. 6,374,038 issued to Daansen et al. ("Daansen").

The following table illustrates a summary of the statutory bases and the cited references for the Examiner's rejections for each pending claim, as best understood by Appellants. The claim sets indicated in the table do not reflect the grouping of claims for the separate arguments of patentability submitted by Appellants in this Appeal Brief. See GROUPING OF CLAIMS on page 16.

			§ 103			
Claims	**§ 101**	**§ 112(P2)**	Reber & Andrews	Reber, Andrews & Brown (RAB)	RAB & Bro	RAB & Daansen
26, 27		X	X			
28, 29, 36, 37		X		X		
38		?		X		
3-14, 39-42	X	X	X			
34, 35, 43-44, 46-48, 51	X	X		X		
45	X	X			X	
49, 50	X	X				X

STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection of Claims **3-14, 26-29 and 34-51**.

SUMMARY OF INVENTION

With respect to some aspects of the present invention, any indicator (or any number of indicators) of compliance may be monitored and/or tracked. For example, an insurance company may monitor a party's compliance with a schedule for taking one medicine, a party's compliance with a schedule for taking multiple medicines, and / or a party's compliance with a requirement that two or more medicine containers be kept within a certain distance or range of one another (e.g., a "proximity requirement"). [See, e.g., Specification, page 8, lines 20-28]. For example, for "self-regulating" medicine containers, an insurance company may track compliance to a medicine schedule merely by monitoring whether the medicine containers are being kept together. [Specification, page 9, lines 20-23].

According to one aspect of the invention, a method is provided for rewarding a party for complying with a medicine schedule. The method includes receiving information regarding whether at least two medicine containers were able to communicate during a pre-determined time period, and determining a level to which the party complied to a medicine schedule based on the information. The method further includes rewarding the party based on the party's level of compliance. [Specification, page 5, lines 9-14].

According to another aspect of the invention a method is provided that includes receiving a signal and, based at least in part on the received signal, determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine. [Specification, page 4, line 30 to page 5, line 2].

ISSUES

Whether Claims **3-14, 34-35 and 39-51** are unpatentable under 35 U.S.C. § 101 as being related to non-statutory subject matter.

Whether Claims **3-14, 26-29 and 34-51** are unpatentable under 35 U.S.C. § 112, second paragraph ("§ 112(P2)"), as being indefinite.

Whether Claims **3-14, 26, 27 and 39-42** are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of Reber and Andrews.

Whether Claims **28, 29, 34-38, 43, 44, 46-48 and 51** are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of Reber, Andrews, and Brown.

Whether Claim **45** is unpatentable under 35 U.S.C. § 103(a) as being obvious in light of Reber, Andrews, Brown, and Bro.

Whether Claims **49 and 50** are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of Reber, Andrews, Brown, and Daansen.

GROUPING OF CLAIMS

The claims in different groups do not stand and fall together.

Appellants group the appealed claims as follows:

GROUP I	Claims **3 and 7-11**
GROUP II	Claims **4-6**
GROUP III	Claims **12-14**
GROUP IV	Claims **34 and 35**
GROUP V	Claims **36 and 37**
GROUP VI	Claim **38**
GROUP VII	Claims **39-42**
GROUP VIII	Claims **43-47**
GROUP IX	Claim **48**
GROUP X	Claim **49**
GROUP XI	Claim **50**
GROUP XII	Claim **51**
GROUP XIII	Claim **26**
GROUP XIV	Claim **27**
GROUP XV	Claim **28**
GROUP XVI	Claim **29**

Appellants believe that claims in different groups are separately patentable, as explained in the following Arguments section.

ARGUMENTS

1. Summary of Arguments

1.1. Claims are Statutory Subject Matter under § 101

The Examiner's §101 rejection of the claims is improper at least because the Examiner has failed to set forth the required prima facie case of unpatentability of any claim. Specifically, the Examiner has not shown that any claim is directed to non-statutory subject matter. Contrary to law, the Examiner believes that if a recited step may be performed mentally, this *per se* renders a claim non-statutory subject matter. Cf. Alco Standard Corp. v. Tennessee Valley Auth., 808 F.2d 1490 (Fed. Cir. 1986).

Moreover, regardless of the failure to present a prima facie case, the pending claims do produce a useful, concrete and tangible result and are thus directed to statutory subject matter. See AT&T Corp. v. Excel Comm. Inc., 172 F.3d 1352 (Fed. Cir. 1999); State Street Bank & Trust Co. v. Signature Fin. Group Inc., 149 F.3d 1368 (Fed. Cir. 1998). The Examiner has implicitly affirmed that at least some claims produce a useful, concrete and tangible result.

Further, the basis for the Examiner's §101 rejection has no basis in law and constitutes an arbitrary and capricious agency action; it imposes a new standard counter to agency precedent, with no reasoned explanation for the departure from precedent being provided.

1.2. Claims Comply with § 112(P2)

The rejections under § 112(P2) fail because the Examiner has merely asserted that claim language is "confusing" or "not clear" without making any findings or providing any rationale in support of such assertions. The Examiner has failed to make a prima facie case of indefiniteness of any claim.

Also, contrary to law, the Examiner inappropriately concludes that simply because claim language may be broad, it must be indefinite. Cf. In re Miller, 441 F.2d 689, 693 (C.C.P.A. 1971).

1.3. Claims are Not Obvious under § 103

The § 103(a) rejections fail for two primary reasons: the Examiner has not made a prima facie case of obviousness, and in any event no reference(s) are of record that could support a showing of obviousness.

The Examiner has also inappropriately relied on mere assertions as to the desirability of providing for various claimed features, unsupported by any evidence of record. Such assertions can only be regarded as the result of impermissible hindsight that is based on the present disclosure.

Accordingly, the rejections are inappropriate and Appellants respectfully request that the rejections be reversed.

2. Form of Appeal Brief

In the arguments herein, limitations of the claims are indicated in *italics* and the references of record are indicated by underlining.

In separate arguments of patentability of different Groups, Appellants have, where possible, referred to prior arguments to avoid undue repetition.

In the arguments below, Appellants refer to:

- the "First Office Action": Non-Final Office Action mailed December 12, 2002 (Paper No. 5);
- Appellants' Response: Amendment & Response mailed May 5, 2003;
- the "Second Office Action": Non-Final Office Action mailed August 12, 2003 (Paper No. 10); and
- the "Examiner's Interview Summary": Summary of interview held May 31, 2003.

3. The References

Discussed below are the only references used in rejecting the appealed claims: Reber, Andrews, Brown, Bro and Daansen.

3.1. The Reber Patent

The Reber patent is cited in support of all of the § 103 rejections.

Reber is directed to a medical communication apparatus that may be in wireless communication with at least one medicine container and with a medical database system. The medical database system communicates with the medical communication apparatus to alert an end user of a time to take at least one medicine. The medical communication apparatus alerts the user (e.g., by an audible or visible indication) and may indicate which medicine to take and an amount to take. [Column 2, lines 39-65; Column 6, lines 22-28].

The medical communication apparatus may also communicate with at least one medicine container by transmitting a signal. In response to receiving the signal, a medicine container may generate an audible or visible indication to aid the end user in locating the container. [Column 8, lines 28-49; Column 2, line 66 to Column 3, line 8].

The Reber system depends on the user to actively indicate his compliance with a prescription. In response to a user-initiated action received by an input device of the medical communication apparatus (e.g., a button) that indicates that the user has complied with taking a medicine, the medical communication

apparatus transmits a signal to the medical database system to acknowledge compliance with a prescription. [Column 8, lines 50-62; Column 5, lines 32-40; Column 3, lines 9-12].

3.2. The Andrews Patent

The Andrews patent is cited in support of all of the § 103 rejections.

Andrews describes a method and system for providing security for an electronic device that signals that a security violation has occurred when a remote unit is not within a selected proximity of the electronic device. [Column 1, lines 40-47]. In one described embodiment, wireless signals are transmitted from a second electronic device to a first electronic device that includes a security device. The security device determines that the first electronic device is not within the selected proximity of the second electronic device in response to a failure to receive the wireless signals. [Column 1, lines 58-64].

Andrews is concerned particularly with securing against the theft of a device such as a portable computer. [See, *e.g.*, Column 1, lines 5-54].

The remote unit is preferably worn or carried by the owner of the portable computer. [See, e.g., Column 2, lines 50-52]. In other words, security of the Andrews system presumes that the remote unit is itself secure (i.e., within the owner's control and not susceptible to theft).

3.3. The Brown Patent

The Brown patent describes a computerized reward system for encouraging participation in a health management program. [Column 1, lines 14-17]. The system includes monitoring means for collecting compliance data on an individual participating in the health management program, memory means for storing the compliance data, evaluation means for comparing the compliance data with evaluation criteria to determine whether or not the individual is compliant, and a reward to be given to the individual who is deemed compliant. [Column 3, lines 17-26].

The monitoring device is designed to produce measurements of a physiological condition of the individual that may be used as compliance data. [Column 5, line 66 to Column 7, line 4]. Compliance questions and prompts may be provided to the individual, and the individual may provide responses to such questions. [Column 6, lines 40-57]. A coupon printer is designed to print coupons if the individual is deemed compliant. [Column 5, lines 55-57]. If the individual is deemed compliant, a server may credit the individual's account in a participating store or credit a memory card. [Column 22, lines 6-11; Column 23, lines 53-67].

3.4. The Bro Patent

The Bro patent describes a method for mediating social and behavioral influence processes through an interactive telecommunications guidance system for use in medicine and business that utilizes an expert in association with a

computer that produces and sends a series of motivational messages and/or questions to a client, patient or employee for changing or reinforcing a specific behavioral problem and goal management. [Abstract].

The Bro patent also discloses a conditioning technique in which a patient or client may list rewards or reinforcers which he himself would receive or provide in his daily life for his behavior. For example, a client committed to limit caloric intake could select a reinforcer such as going to a motion picture upon meeting that goal. Thus, this "self-reinforcing procedure" allows the client to select his own reward and to provide the reward to himself (e.g., go to the movies) for meeting a prescribed goal. [Column 41, lines 22-53].

3.5. The Daansen Patent

The Daansen patent describes a dispenser that uses audio and visual means to assist the user in proper washing techniques for compliance with recommended guidelines and to monitor the number of usages. [Abstract]. The Background Art section discusses the Food and Drug Administration's (FDA) Food Code. the regulations require a supervisor to ensure compliance with the regulations and promote the effective washing protocols. Employers may be fined or lose licenses if employees do not observe these regulations, and such employees are likely to lose their employment. [Column 1, line 54 to Column 2, line 16].

4. GROUP I

GROUP I includes independent Claim **3** and Claims **7-11** dependent therefrom.

The rejection of GROUP I is flawed because the Examiner has not made a prima facie case that any claim of GROUP I is directed to non-statutory subject matter:

- as impliedly conceded by the Examiner, each claim produces a useful, concrete and tangible result;
- the Examiner erroneously believes that if a claimed step may be performed mentally, the claim as a whole must be non-statutory subject matter; and
- contrary to law, the Examiner applies a novel, unspecified and unsupported legal requirement that a claim must recite a "limitation in the technological arts."

The rejection of GROUP I is flawed because the Examiner has not made a prima facie case of indefiniteness:

- contrary to law, the Examiner's rejection apparently lies on the mere fact that the Examiner finds the scope of the claims is broad; and
- the Examiner has made no reasoned findings as to why one of ordinary skill would find the scope of any claim is unreasonably unclear when read, as required, in light of the specification.

The rejection of GROUP I is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP I to be disclosed or suggested by any reference (or combination of references); and

- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP I cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP I obvious.

4.1. Independent Claim 3

Claim **3** is directed to a method comprising receiving a signal. The method also includes determining, based at least in part on the signal, whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine.

Claims **7-11** depend (directly or indirectly) from Claim **3**.

Accordingly, although independent Claim **3** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claims **7-11**.

4.2. Advantages of Claim 3

The embodiment of Claim **3** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either

alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

In general, as discussed in the present application, the method of Claim **3** is advantageous in that it provides for *determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal.* The present invention recognizes, in some embodiments, that some types of entities (e.g., an insurance company) may monitor a party's compliance to a medicine schedule by monitoring whether a medicine container was positioned so as to be able to communicate wirelessly with another medicine container. [See, *e.g.*, Specification, page 11, line 31 to page 12, line 2]. For example, an insurance company may track compliance to a medicine schedule merely by monitoring whether two "self-regulating" medicine containers are being kept together (e.g., whether a "proximity requirement" is satisfied by keeping the containers within a certain distance or range of one another). [See, e.g., Specification, page 9, lines 20-23].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

4.3. The Claims of GROUP I are Statutory

The proper legal standard for statutory subject matter was not applied to the rejected claims. In fact, applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

In addition, the terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable.

4.3.1. The Basis for the Rejection

As best as Appellants understand the rejection of the claims of GROUP I as being directed to non-statutory subject matter, the basis for that rejection is one or more of:

- the claims do not recite "a limitaion [sic] in the technological arts" [Second Office Action, page 2]; and
- the claims "are abstract ideas which can be performed mentally without interaction of a physical structure" [Second Office Action, page 2].

To the extent the rejection actually applied a standard that requires additional criteria or otherwise departs from the requisite legal analysis under § 101, the rejection is flawed.

Further, to the extent the rejection is based on a standard that departs from the policy of the U.S. Patent and Trademark Office without a rational basis, that standard is arbitrary.

4.3.2. The Proper Legal Test for Statutory Subject Matter

Whether a patent claim is directed to statutory subject matter under 35 U.S.C. § 101 is a question of law. AT & T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1355 (Fed. Cir. 1999). The legal test for the presence of statutory subject matter is only that a claimed process or apparatus produce a "useful, concrete and tangible result". See, e.g., State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1375 (Fed. Cir. 1998), cert. denied, 525 U.S. 1093, 142 L. Ed. 2d 704, 119 S. Ct. 851 (1999) ("For purpose of our analysis, as noted above, claim 1 is directed to a machine programmed with the Hub and Spoke software and admittedly produces a 'useful, concrete, and tangible result.' ... This renders it statutory subject matter, even if the useful result is expressed in numbers, such as price, profit, percentage, cost, or loss."); AT & T, 172 F.3d at 1361 ("the focus is understood to be not on whether there is a mathematical algorithm at work, but on whether the algorithm-containing invention, as a whole, produces a tangible, useful, result."); See also, State Street Bank, 149 F.3d at 1373 ("In Alappat, we held that data, transformed by a machine through a series of mathematical calculations to produce a smooth waveform display on a rasterizer monitor, constituted a practical application of an abstract idea ... because it produced 'a useful, concrete and tangible result'--the smooth waveform); See also, State Street Bank, 149 F.3d at 1373 ("in Arrhythmia Research Technology Inc. ... , we held that the transformation of electrocardiograph signals from a patient's heartbeat by a machine through a series of mathematical calculations constituted a practical application of an

abstract idea ... because it corresponded to a useful, concrete or tangible thing--the condition of a patient's heart").

While other criteria, if satisfied, may be useful in indicating the presence of a "useful, concrete and tangible result" (and therefore indicate that a claim is statutory), the absence of such criteria does not preclude a finding of statutory subject matter. Such other criteria are not requirements, but merely some of several ways that can demonstrate that an invention produces a useful, concrete and tangible result.

For example, a physical transformation by a claimed process is one example (but not a requirement) of how a mathematical algorithm may bring about a useful application. AT & T Corp., 172 F.3d at 1357. See also, Diamond v. Diehr, 450 U.S. 175, 192 (1981) (the "e.g." signal denotes that physical transformation is an example, not an exclusive requirement for satisfying § 101); Arrhythmia Research Tech. Inc. v. Corazonix Corp., 958 F.2d 1053, 1060, 22 U.S.P.Q.2D 1033, 1039 (Fed. Cir. 1992) (the transformation simply confirmed that Arrhythmia's method claims satisfied § 101 because the method produced a number which had specific meaning - a useful, concrete, tangible result - not a mathematical abstraction).

Likewise, physical limitations are perhaps helpful, but are not necessary to render a claim statutory. AT&T, 172 F.3d at 1359 ("Whatever may be left of the earlier test, if anything, this type of physical limitations analysis seems of little value ...")

Certain features are not helpful to the proper analysis, and have no bearing on the presence of statutory subject matter. For example, whether a result of a

claim is expressed in numbers makes no difference. State Street Bank, 149 F.3d at 1374 ("[E]ven if the useful result is expressed in numbers, such as price, profit, percentage, cost or loss", the invention that produces that result is statutory); Arrhythmia, 958 F.2d 1053 at 1060 ("That the product is numerical is not a criterion of whether the claim is directed to statutory subject matter."). When a mathematical algorithm included within a claimed process is "applied to produce a number which had specific meaning - a useful, concrete, tangible result - not a mathematical abstraction," that process claim satisfies § 101. AT & T Corp., 172 F.3d at 1357 (citing Arrhythmia, 958 F.2d 1053 at 1060).

Under the proper standard, claims have been found statutory because they produced useful results such as "a final share price", State Street Bank, 149 F.3d at 1373; a "value of a PIC indicator" which represents "information about the call recipient's PIC", AT&T Corp., 172 F.3d at 1357; and a condition of a patient's heart, Arrhythmia 958 F.2d at 1060.

The threshold for utility is not high – an invention is "useful" under § 101 if it is capable of providing some identifiable benefit.

4.3.3. The Claims Meet the Standard for Statutory Subject Matter

The pending claims produce a useful, concrete and tangible result.

The First Office Action rejected Claim **3** as failing to have a useful, concrete and tangible result. In Appellants' Response, Appellants traversed this rejection. The Examiner made no explicit response to Appellants' argument in the Second Office Action. However, the Examiner in the Second Office Action

provided a new basis for rejection under § 101, discussed herein, and did not mention useful, concrete and tangible result at all.

Accordingly, it is Appellants' understanding that the Examiner concedes, in light of Appellants' argument, that Claim **3** produces a useful, concrete and tangible result. It is Appellants' understanding that the basis for rejection stated in the First Office Action has been withdrawn.

The claims of GROUP I include the limitation of *determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal.* As explained in the Present Application and in Appellants' Response, an insurance company, for example, may monitor a party's compliance to a medicine schedule by monitoring whether two or more medicine containers were able to communicate during a pre-determined time period. [See, *e.g.*, Specification, page 11, line 31 to page 12, line 2; Appellants' Response, page 12].

Making such a determination thus results in a useful, concrete and tangible result – information about the positioning of two containers for storing medicine, information by which, in some embodiments, an entity might determine compliance with a medicine schedule.

This determination, therefore, is not an abstract, disembodied result, but instead has a specific meaning and corresponds to a useful, concrete or tangible result – information about the relative positioning of two containers. The processes claimed can by no stretch of the imagination be classified as "abstract ideas," and are thus properly defined statutory processes.

It is also worth noting that the requirement for a "useful invention" is to be evaluated for the invention, and is not dependent on the breadth of the claims. Thus, if one species of an invention claimed as a genus is found to be "useful", utility for the genus is established. Raytheon Co. v. Roper Corp., 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) ("When a properly claimed invention meets at least one stated objective, utility under § 101 is clearly shown."). Utility is to be evaluated in a simple "yes" or "no" fashion (i.e., does the invention as claimed possess or not possess utility). There is no subjective test for "utility" that must be deemed to be commensurate with the breadth of the claims being sought to be patented.

Moreover, the scope of the claims as presented encompass a variety of specific implementations of the claimed processes. Certain of these embodiments implicate the use of processors and / or containers that are capable of wireless communication in the processes. Other embodiments, such as in Claim **4**, implicate the use of a signaling device that monitors at least one indicator of whether the two containers are positioned so as to wirelessly communicate. Such container- and device-based species clearly fall within the broader generic definition of the claimed processes. Given that utility for a genus may be established through a recitation of utility of a species within that genus, a rejection that the generically claimed processes lack utility is clearly improper.

4.3.4. The Examiner Applied a Test Which is Contrary to Law

A claim need not "recite a limitaion [sic] in the technological arts"

There is no authority requiring claims to "recite a limitaion [sic] in the technological arts," whatever that may mean.

The Examiner does not indicate any relevant case law that puts forth such a test.

A Claim Need Not Preclude an Embodiment "Performed Mentally"

The Court of Appeals for the Federal Circuit has clearly spoken on this issue. Contrary to the Examiner's assertion, a claimed process may read on a mentally performed embodiment.

The presence of the steps of correlating and combining, which a machine is capable of doing, does not invalidate a patent. Alco Standard Corp. v. Tennessee Valley Authority, 808 F.2d 1490, 1496 (Fed. Cir. 1986). "The inclusion in a patent of a claim to a process that may be performed by a person, but that is also capable of being performed by a machine, is not fatal to patentability." Diehr, 450 U.S. 175, 67 L. Ed. 2d 155, 101 S. Ct. 1048 (1981).

See, also, Musco Corp. v. Qualite, Inc., Civ. Application, 106 F.3d 427, 1997 WL 16031 (Fed. Cir. 1997), (per curiam) (unpublished), cert. denied, 118 S. Ct. 60 (1997) ("The existence of mental steps in the claims or specification of a patent do not, in and of themselves, invalidate the patent.").

Further, the mere fact that some or all of the steps of a method "may be carried out in or with the aid of the human mind" does not render a sequence of operational steps non-statutory under 35 U.S.C. §101. In re Musgrave, 431 F.2d

882, 57 C.C.P.A. 1352 (C.C.P.A. 1970). The court in Musgrave rejected the Examiner's reasoning that the claims at issue were non-statutory under 35 U.S.C. §101 because recited steps do not "require any tangible device or apparatus to carry out the method and hence could be carried out mentally." Musgrave, 431 F.2d at 886. See also, In re Prater, 415 F.2d 1378 (C.C.P.A. 1968) ("patent protection for a process disclosed as being a sequence or combination of steps, capable of performance without human intervention...is not precluded by the mere fact that the process could alternatively be carried out by mental steps.")

A Claim Need Not Recite "Interaction of a Physical Structure"

In requiring the claims preclude a "mental" embodiment, the Examiner also indicates that the claim must recite "interaction of a physical structure" or otherwise recite some type of physical limitation.

It is a misunderstanding of Federal Circuit case law to contend that process claims lacking physical limitations (e.g., "physical structure") are not patentable subject matter. AT & T, 172 F.3d at 1359. This type of analysis derives from a prior test for statutory subject matter which has been discredited. AT&T at 1359 ("Whatever may be left of the earlier test, if anything, this type of physical limitations analysis seems of little value ..."). This type of physical limitations analysis is of little value in the § 101 analysis because "the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a 'useful, concrete

and tangible result.'" AT & T 172 F.3d 1352, 50 USPQ2d 1447, 1452 (Fed. Cir. 1999).

4.3.5. The Examiner Has Not Even Applied His Test to GROUP I

Other than the conclusory statement that the claims fail to satisfy the standard(s) described above, there is no explanation of why the particular claims of GROUP I do not "recite a limitaion [sic] in the technological arts."

The Examiner has not set forth in the record any factual findings, such as:

- how various claim terms of Claim **3** (or any other claim of GROUP I) have been construed (e.g., the terms "signal," "container for storing a first medicine," "positioned so as to wirelessly communicate," "determining...based at least in part on the signal"); and
- what exactly constitutes "a limitaion [sic] in the technological arts."

In fact, the only claim steps the Examiner cites do not appear in Claim **3**. [See, Second Office Action, page 2].

Absent any findings, the result of the test purportedly applied cannot be evaluated, and must be considered arbitrary.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP I is non-statutory.

4.4. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP I. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP I are definite.

4.4.1. The Standard for Definiteness

Compliance with § 112, second paragraph, is a question of law. Miles Lab., Inc. v. Shandon, Inc., 997 F.2d 870, 874 (Fed. Cir. 1993).

The examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

The inquiry under § 112(P2) focuses on whether the claims, as interpreted in view of the written description, adequately perform their function of notifying the public of the scope of the patentee's right to exclude. Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 U.S.P.Q.2D 1279, 1283 (Fed. Cir. 2000).

The Federal Circuit has explained that the second paragraph of § 112 contains two requirements: First, a claim must set forth what the applicant regards as his invention; and second, it must do so with sufficient particularity and distinctness, i.e., the claim must be sufficiently "definite." Allen Eng'g Corp. v. Bartell Indus., 299 F.3d 1336, 1348 (Fed. Cir. 2002) (citing Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1377 (Fed. Cir. 2000)). See also, MPEP § 2171.

With respect to the first requirement, the subject matter set out in a claim must be presumed, in the absence of evidence to the contrary, to be that "which the applicant regards as his invention." In re Moore, 439 F.2d 1232, 1235 (C.C.P.A. 1971). See also, MPEP § 2172.

With respect to the second requirement: "If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, § 112 demands no more." Miles Laboratories, Inc. v. Shandon, 997 F.2d 870, 875 (Fed. Cir. 1993); see also, S3 Inc. v. nVIDIA Corp., 259 F.3d 1364, 1367 (Fed. Cir. 2001). The claims need set out and circumscribe a particular area with only a reasonable degree of precision and particularity. In re Moore, 58 C.C.P.A. 1042, 1046-1047 (C.C.P.A. 1971).

It is impermissible in law to apply the "full, clear, concise, and exact" requirement of the first paragraph of § 112 to a claim, when that paragraph applies only to the disclosure portion of the specification, not to the claims. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1575-1576 (Fed. Cir. 1986) (citing Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 453, 227 (Fed. Cir. 1985)). See also, MPEP § 2173.02 ("Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire.").

Breadth is not to be equated with indefiniteness. In re Miller, 441 F.2d 689, 693 (C.C.P.A. 1971); In re Robins, 429 F.2d 452, 458 (C.C.P.A. 1970) (finding claims definite under § 112 (2) even though "[g]iving the language its broadest possible meaning...the breadth of the claims insofar as the catalyst is concerned is indeed immense. However, 'Breadth is not indefiniteness.'"

(citation omitted, emphasis added)). See also, In re Warmerdam, 33 F.3d 1354, 1361 (Fed. Cir. 1994) ("There has been no showing that one skilled in the art would have any particular difficulty in determining whether a machine having a memory containing data representing a bubble hierarchy is or is not within the scope of claim 5. The Board's point, that the claim leaves unclear the technique of how the memory is configured with the data, has no bearing on this issue. The claim plainly covers all such techniques."); MPEP § 2173.04.

It is impermissible in law to require that a claim "describe" the invention, which is the role of the disclosure portion of the specification, not the role of the claims. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1575-1576 (Fed. Cir. 1986) (citing Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 453, 227 (Fed. Cir. 1985)). "[I]t is not necessary that a claim recite each and every element needed for the practical utilization of the claimed subject matter," as it is "entirely appropriate, and consistent with § 112, to present claims to only [one] aspect." Bendix Corp. v. United States, 600 F.2d 1364, 1369 (1979). There is no requirement under § 112, second paragraph, that a claim must be "a self-contained explanation of every step. That is not the role of claims. The purpose of claims is not to explain the technology or how it works, but to state the legal boundaries of the patent grant." S3 Inc. v. nVIDIA Corp., 259 F.3d 1364, 1369 (Fed. Cir. 2001).

4.4.2. The Standard Used in the Rejection

The Second Office Action includes, for the first time, rejections under § 112(P2) for indefiniteness.

As best understood by Appellants, the Examiner rejects Claim **3** for all of the following reasons:

- "'receiving a signal' is not descriptive";
- "It is not clear what does the term 'signal' encompass";
- "neither signal-producing means, no signal-receiving means are indicated, therefor [sic] it is not clear what does the term 'receiving' imply";
- the *determining* step "is confusing, because it is not clear what does the term 'determining' contemplate"; and
- "the use of the terms 'a first container for storing a first medicine' and 'a second container for storing a second medicine' is confusing, because these terms were not defined prior to said method step."

[Second Office Action, page 2]. These reasons are discussed in detail below.

No assertion or finding is made that what is claimed is not regarded by Appellants as their invention.

4.4.3. The Claims Meet the Standard for Definiteness

Rejections Are Not Supported by Any Evidence

The Examiner's § 112(P2) rejection is conclusory and without supporting evidence in the record.

The Examiner contends, without any supporting evidence, that one having ordinary skill in the art, with access to the written disclosure, would remain unreasonably confounded by the meanings of the words *receiving*, *signal*, *determining* and *container for storing...medicine*.

The Examiner has not provided any evidence in support of the assertions that terms in Claim **3** would be unreasonably unclear or "confusing" in scope. There is no evidence that the plain meaning of any term is "confusing" or not clear to one skilled in the art. The Examiner does not provide any indication, for example, that any term is unfamiliar, contrary to accepted use, or an objectionably ambiguous term of degree. Appellants submit that the plain meaning of all of the terms in Claim **3** would be clearly understood by one skilled in the art.

Even where the Examiner indicates, for example, that *receiving a signal* is unclear because no means for receiving are recited in the claim, the Examiner does not provide any finding or reasoned explanation as to why this fact alone renders the plain meaning of *receiving a signal* unclear to one of skill in the art.

Further, the Examiner has not provided any evidence that terms in Claim **3** would be unclear or "confusing" when considered, as required, in light of the disclosure in the Specification.

In fact, there is no indication that the Examiner has considered any claim in light of the Specification, as is required. The failure to make a finding that Claim **3** is indefinite when read in light of the Specification is a failure to establish a *prima facie* case of indefiniteness. Any rejection under § 112(P2) would fail for at least this reason.

There is no indication that the Examiner has determined the level of ordinary skill in the art, or considered Claim **3** as one having ordinary skill in the art would in light of the Specification, as is required. The failure to determine the level of ordinary skill in the art (and the accompanying failure to consider the

specification from this viewpoint) is a failure to establish a *prima facie* case of indefiniteness. Any rejection under § 112(P2) would fail for at least this reason.

A Claim Term Need Not Be "Descriptive" or "Defined" in the Claim Itself

The Examiner indicates that *receiving a signal* is not adequately described in the claim because no means for receiving are recited. The Examiner indicates that *signal* is confusing because what it "encompasses" is not defined in the claim. Similarly, the Examiner indicates that *determining* ("what does the term...contemplate") and *container for storing...medicine* ("these terms were not defined prior") are not adequately defined in the claim.

The Examiner is simply and impermissibly requiring that the claims describe the claimed inventions in further detail. It is impermissible in law to require that a claim "describe" the invention, which is the role of the disclosure portion of the specification, not the role of the claims. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1575-1576 (Fed. Cir. 1986) (citing Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 453, 227 (Fed. Cir. 1985)).

There is no requirement under § 112, second paragraph, that a claim must be "a self-contained explanation of every step. That is not the role of claims. The purpose of claims is not to explain the technology or how it works, but to state the legal boundaries of the patent grant." S3 Inc. v. nVIDIA Corp., 259 F.3d 1364, 1369 (Fed. Cir. 2001).

The Examiner's bases for rejection are thus impermissible. The Examiner has inappropriately failed to consider how the ordinary meaning of such terms

would be understood by those skilled in the art, and has inappropriately failed to consider various examples in the written disclosure.

The Examiner has not made any finding that any term would be unreasonably unclear on its face. The Examiner has not made any finding that any term would be unreasonably unclear when read in light of the Specification, as required in a proper § 112(P2) analysis.

Appellants submit that the terms *determining*, *container for storing...medicine*, *receiving*, *signal* and *receiving a signal* would be clearly understood by one of ordinary skill when considered even in a vacuum. Further, when read, as required, in light of the Specification from the viewpoint of one having ordinary skill in the art, the meaning of the terms is reasonably clear.

Breadth is Not Indefiniteness

The Examiner might believe the claims to be indefinite because Claim **3** does not recite any specific means for receiving a signal, any specific type of signal, or any specific mode of determining.

However, this has no bearing on the issue of definiteness. The scope of Claim **3** is unambiguous.

On their face, the claims clearly cover the receiving of any type of signal, using any type of means. Similarly, on their face, the claims clearly cover the determining, in any manner, of whether two containers were positioned so as to wirelessly communicate.

Whether the claims are broad in this respect has no bearing on their definiteness.

The Examiner's rejection is quite similar to the rejection overturned by the Federal Circuit in In re Warmerdam, 33 F.3d 1354 (Fed. Cir. 1994). There, the Board of Patent Appeals and Interferences had rejected claim 5 as indefinite. Claim 5 (reproduced below)

> 5. A machine having a memory which contains data representing a bubble hierarchy generated by the method of any of Claims 1 through 4.

was believed indefinite because it did not explain "how a memory is made or produced by the steps of generating". Id., at 1361.

The Federal Circuit reversed because explanatory detail is not required to make a claim definite.

> "The Board's point, that the claim leaves unclear the technique of how the memory is configured with the data, has no bearing on this issue. The claim plainly covers all such techniques. Whether such a programmed machine is new, useful, unobvious, or otherwise patentable is not at issue in this appeal, and we express no opinion thereon. Accordingly, we conclude the Board erred in sustaining the rejection of claim 5 for indefiniteness."

Id., at 1361.

By the same reasoning, pending Claim **3** is not indefinite merely because it covers many embodiments of receiving, signals and determining. The claims plainly cover all such embodiments, and thus are definite.

> Neither "Providing" nor Definition of a *container for storing...medicine* Prior to its Reference in a Method Step is Required for Definiteness

As best understood by Appellants, the Examiner finds *container for storing...medicine* to be indefinite because "these terms were not defined prior to said method step [of *determining*]." [Second Office Action, page 2].

The exact requirement being imposed is not clear, nor is it clear how the Examiner believes *container* could or should be "defined prior." As discussed above, definition of a term in a claim is not a legal requirement for definiteness; the term's meaning need only be reasonably clear to one skilled in the art when considered in light of the written disclosure.

The statement that such a definition is not provided "prior" to the step of *determining* is peculiar and not explained. Even if a definition were required in the claim (which Appellants dispute), it is not clear what the location of such a definition in the body of the claim (relative to the *determining* step) would have to do with the definiteness of the term.

One possible explanation is that the Examiner believes a prior step of "providing" the *container* must be recited. During a telephone conversation, Supervisory Primary Examiner Weiss introduced the possibility of a rejection under § 112(P2) for failure to recite "providing" a *container*. Appellants understood SPE Weiss to be asserting that before a step may be performed that involves a particular apparatus, a claimed method must first somehow explicitly recite a step establishing the existence of that apparatus, or somehow make that apparatus available to the entity performing the method. As explained in Appellants' Response:

> As best understood by Applicants, SPE Weiss suggested that Section 112, second paragraph, requires that a method claim must recite a method step of "providing" a structural component if that structural

> component is referred to in another method step. For example, in order to comply with Section 112, second paragraph, an exemplary independent method claim reciting a step of "determining whether a first apparatus is in communication with a second apparatus" must be amended to include a new step of "providing the first apparatus and the second apparatus"....

[page 11]. The Examiner might be relying upon this basis in the present rejection, but it is not entirely clear.

In any case, Appellants traversed this argument in Appellants' Response:

> Although Applicants are aware that a claim may be rejected under Section 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, Applicants are not aware of any statutory basis for requiring that a method claim recite "providing" of a structural component referred to in the steps of the method. Applicants respectfully request an explanation of the statutory basis and the rationale for requiring a "providing" of a structural component as an "essential element."

[page 12 (emphasis in original)].

The Examiner has failed to indicate the requested legal basis for any requirement to "provide" or "define" a structure prior to referring to it in a method claim.

Regardless, any such requirement is clearly without basis in law. Under such a standard, it would be fatally indefinite to refer to any type of structure or object in a method step, unless that element were somehow "defined" or "provided" prior to such a reference. Of course, there is nothing indefinite *per se* about referring to an object, structure, or any other type of element for the first time in the context of a process step. For example, there is nothing ambiguous about a hypothetical process step of "determining whether water in a pot on a

stove is boiling" even if "water," "pot" and "stove" are not explicitly "provided" or "defined" in "prior" steps (or any other step).

Similarly, there is no requirement that *container for storing...medicine* be explicitly defined or "provided" in any claim for the claim to be definite.

Claim **3** is Not Broader than the Disclosure

The Examiner has not made any finding or assertion that any claim is not adequately described or enabled by the Specification.

To the extent that the Examiner is holding that Claim **3** is broader than the disclosure because it fails to be limited to what is enabled and / or described in the disclosure, such rejections are more properly considered under the first paragraph of 35 U.S.C. § 112 than under the second paragraph. Robins, 429 F.2d 452, 456-57, n. 8 (C.C.P.A 1970) (citing In re Halleck, 422 F.2d 911 (C.C.P.A 1970); In re Borkowski, 422 F.2d 904 (C.C.P.A. 1970); and In re Wakefield, 422 F.2d 897 (C.C.P.A. 1970)); see also, MPEP § 2174 ("If a description or the enabling disclosure of a specification is not commensurate in scope with the subject matter encompassed by a claim, that fact alone does not render the claim imprecise or indefinite or other-wise not in compliance with 35 U.S.C. 112, second paragraph; rather, the claim is based on an insufficient disclosure (35 U.S.C. 112, first paragraph) and should be rejected on that ground." (citing Borkowski)).

To the extent the Examiner intended a rejection under the first paragraph of § 112, the rejection must be reversed. The Specification contains at least one statement of the embodiment claimed in Claim **3**. [See, Specification, page 4,

line 30 to page 4, line 2]. Claim **3** is also pending as it was originally filed. Further, the sufficiency of the Specification to satisfy the "best mode" requirement of § 112 or to enable one skilled in the art to practice Appellants' process as broadly as it is claimed has not been questioned by the Examiner.

Accordingly, the claims are not broader than the disclosure, and there are no grounds for a rejection under 35 U.S.C. § 112, first paragraph. See, Robins, 429 F.2d at 456.

Accordingly, the Examiner has not set forth a prima facie case of indefiniteness of any claim of GROUP I.

4.5. No Prima Facie Showing of Obviousness of GROUP I

The Examiner has based a rejection of GROUP I on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP I.

4.5.1. The Proper Legal Standard under 35 U.S.C. § 103(a)

The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). To reject claims in an application under § 103, an examiner must show an unrebutted *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

The factual predicates underlying an obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). The secondary considerations are also essential components of the obviousness determination. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

When a rejection is based on a combination of references, the Examiner can satisfy the *prima facie* burden only by showing some objective teaching leading to the purported combination of references. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). Lacking a motivation to combine references, there is no *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998).

Finally, during examination, claims are given their broadest reasonable interpretation consistent with the specification. In re Hyatt, 211 F.3d 1367 (Fed. Cir. 2000). The "PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

4.5.2. Substantial Evidence is Required of All Factual Findings

In a determination of obviousness, factual findings as to scope and content of the prior art, level of ordinary skill in the art, differences between the claimed invention and the prior art, and secondary considerations of nonobviousness must be supported by substantial evidence. Novamedix Distrib. Ltd. v. Dickinson, 175 F. Supp. 2d 8, 9 (D.D.C. 2001).

Mere administrative or judicial notice of what existed in the prior art is not permitted. "[D]eficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" In re Zurko, 258 F.3d 1379, 1385 (Fed. Cir. 2001); In re Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002).

4.5.3. Absent Substantial Evidence, No Prima Facie Case Exists

To reject claims in an application under § 103, an examiner must show an unrebutted *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The initial burden of presenting a *prima facie* case of obviousness is upon the examiner. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Rijckaert, 9 F.3d 1531, 1532 (Fed. Cir. 1993); Novamedix Distrib. Ltd. v. Dickinson, 175 F. Supp. 2d 8, 9 (D.D.C. 2001).

If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

4.5.4. No Showing that the References Suggest *determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine*

The Examiner has not shown that the cited references, alone or in combination, suggest *determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal.*

Factual Evidence

The closest the Examiner comes are the following statements:

> communication between medicine containers...was disclosed by a combination of Reber et al. in view of Andrews, wherein Reber et al. shows medical containers including a circuitry for wireles [sic] communicatin [sic], and Andrews shows wireless communication between two portable devices to determine whether or not the second portable device is within a selected proximity of the first portable device....
>
> * * *
>
> In this case, both Reber et al. and Andrews relate to comuterise [sic] devices including a housing or a container, and wireless communication circuitry allowing said devices to communicate with similar devices.

[Second Office Action ("Response to Arguments"), page 10].

The Examiner's reliance on and interpretation of Reber are not clear from the record. In addition to the statements above, for example, the Examiner asserts that Reber discloses "determining whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine based at least in part on the signal (column 2, line 41 through column 6, line 53)." Confusingly, the Examiner then explicitly contradicts himself: "Reber et al. do not teach that the fist container wirelessly communicates with the second container." [Second Office Action, page 4 (emphasis added)]. Further, during the Interview, Examiner Borissov asserted that communication between medicine containers is "inherently presented" in Reber. [Interview Summary; Second Office Action, page 10]. Appellants traversed this assertion in Appellants' Response (pages 13-14). The Examiner did not reiterate this finding in the Second Office Action; however, the Examiner also did not respond to or even acknowledge Appellants' response to this interpretation.

With respect to Andrews, the Examiner also asserts: "Andrews teaches a system and method for providing security for an electronic device wherein a first portable security device communicates with a second portable security device to determine whether or not the second security device is within a selected proximity of the first security device (Abstract)." [Second Office Action, page 4].

No further reasoning is provided for the Examiner's interpretation of the prior art.

These Findings Have No Support in the Record

Nothing in the Examiner's statements of record approaches substantial evidence in the prior art of the recited features; the statements cannot support a *prima facie* case of obviousness.

In order to establish that the combination of Reber and Andrews would teach the feature of *determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal*, the Examiner must provide substantial evidence that the asserted combination would provide for each of the following:

(i) a container for storing a first medicine that is capable of communicating wirelessly with a second container for storing a second medicine; and

(ii) determining whether a first container for storing medicine was positioned so as to wirelessly communicate with a second container for storing medicine.

The Examiner has failed to do so. Specifically, the references do not teach or suggest a container for storing medicine that is capable of communicating wirelessly with another container for storing medicine, or the desirability of such.

Communication Between Medicine Containers Is Not "inherently presented" in Reber

The Examiner has not withdrawn the argument that communication between medicine containers is "inherently presented" in Reber. To the extent the Examiner is still relying on this interpretation, the rejection cannot stand.

There is no evidence in support of such an interpretation. Under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element "is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Cont'l Can Co. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991). Thus, inherent anticipation requires that the missing descriptive material is necessarily present, not merely probably or possibly present, in the prior art. Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295 (Fed. Cir. 2002).

Accordingly, the question is whether one skilled in the art would read Reber as inherently disclosing a medicine container able to communicate with another medicine container; that is, whether one skilled in the art would read the "medicine container" of Reber as necessarily (not probably or possibly) presenting a container for storing medicine able to communicate with another such container.

Such a finding cannot be supported by the record. Reber describes a system in which each described "medicine container" may be in communication with the described "medical communication apparatus" via a transmitter and/or receiver. Appellants, however, cannot identify evidence in the record to support a finding that one skilled in the art would read Reber as showing a "medicine container" that is necessarily able to communicate with another "medicine container." For example, there is nothing in Reber, or otherwise in the record, to support the Examiner's implied assertion that the described transmitter and/or receiver of a described "medicine container" must be operable to communicate

with another such "medicine container." Accordingly, Appellants respectfully submit that a medicine container able to communicate with another medicine container is not "inherently presented" in Reber.

The References Do Not Suggest Communication between Medicine Containers

Appellants respectfully submit that neither Reber nor Andrews teaches or suggests a container for storing a medicine that is even able to communicate with another container for storing a medicine. None of the cited references explicitly discloses or suggests either: (i) the ability of a "medicine container" described in Reber to communicate with another "medicine container," or (ii) the desirability of such a feature.

Appellants acknowledge that Reber discloses wireless communication between the "medical communication apparatus" and one or more "medicine containers." Appellants also acknowledge that Andrews discloses wireless communication between the "remote unit" (e.g., worn or carried by an owner) and the "security device" disposed in an electronic device.

Appellants respectfully traverse any reliance on Andrews and / or Reber as suggesting the desirability of wireless communication between any two electronic devices. The references are limited to the scope and content as understood by one skilled in the art at the time of the invention, but without the benefit of Appellants' disclosure. Each reference suggests wireless communication between the described (i) "medical communication apparatus" and "medicine container" and (ii) the described "remote unit" and "security device." Nothing in either

system suggests the desirability of modifying the Reber system to provide specifically for any type of communication between the "medicine containers" of Reber.

The Examiner's apparent reliance on Andrews as teaching or suggesting wireless communication between containers for storing medicine is unsubstantiated. To the extent that Andrews teaches wireless communication between devices, it is merely cumulative to Reber; Reber already discloses wireless communication between the "medical communication apparatus" and a "medicine container." The "medical communication apparatus" of the Reber system does not teach or suggest an apparatus for storing medicine; the Examiner does not suggest otherwise.

Nothing in Andrews, however, suggests specifically modifying one container for storing medicine to enable communication with another container. The Examiner has provided no hint or suggestion in the record to suggest the desirability of such a modification in light of either reference, alone or in combination.

Appellants dispute the general assertion by the Examiner that Andrews and Reber are directed to "wireless communication circuitry allowing said devices to communicate with similar devices." [Second Office Action, page 10 (emphasis added)]. To the extent that the Examiner is asserting that Andrews or Reber suggests wireless communication between two laptop computers or two "medicine containers" (i.e., "similar devices"), Appellants dispute such an assertion. The presumption of the Andrews system is that both such devices would be at risk of theft (otherwise, there would be no need for security). If both

laptops or medicine containers were to be stolen together, for example, the proximity-based security system would be ineffective. Andrews also clearly suggests that for security to be provided, one of the devices in the Andrews system must be in the owner's control (e.g., worn or carried).

There is no suggestion in either Andrews or Reber that the "medicine containers" should be secured in the manner described in Andrews; the Examiner does not provide any evidence to the contrary. Andrews is devoid of any hint of a container for storing medicine or the desirability of securing such a container.

Further, even if one of skill in the art were motivated by Andrews to provide security in the Reber system (which Appellants dispute), the Examiner has provided no reasoning whatsoever as to why one of skill in the art seeking such security would find it necessary or desirable to modify the "medicine containers" to communicate wirelessly with one another. In fact, as Reber already provides for communication between "medical communication apparatus" and a "medicine container," a less complicated solution would likely be to modify those devices in light of Andrews, rather than undertake the additional complexity of modifying the "medicine containers" to communicate wirelessly with one another.

Thus, there is no teaching or suggestion in the references of two medicine containers capable of communicating with each other, much less *determining whether a first medicine container is positioned so as to communicate with a second medicine container* (as generally recited in independent Claim **3**), nor is there any suggestion in the record of the desirability of such features.

4.5.5. No Showing of a Proper Motivation to Modify the References

The Examiner has not shown a motivation in the prior art of record to modify and / or combine the cited references in the manner proposed by the Examiner, or in any other manner that renders the claims obvious.

Applicable Law

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992). Furthermore, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (emphasis added).

A finding of obviousness requires that the art contain something to suggest the desirability of the proposed combination. In re Grabiak, 769 F.2d 729, 732 (Fed. Cir. 1985). In the absence of such a showing, there is inadequate support for the position that the proposed modification would prima facie have been obvious. Id. The absence of such a suggestion to combine is dispositive in an obviousness determination. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579 (Fed. Cir. 1997) (emphasis added).

When the art in question is relatively simple, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1352 (Fed. Cir. 2001). In each case the factual inquiry whether to combine references must be thorough and searching. Id., at 1352 - 53.

No Substantial Evidence of a Motivation to Combine or Modify

The Examiner has proposed that one of ordinary skill in the art at the time the invention was made would have modified or combined the purported prior teachings of Andrews and Reber. As best understood by Appellants, the Examiner asserts the following to be true with respect to independent Claim **3**:

(a) It would have been obvious to one of ordinary skill in the art to modify Reber in light of Andrews to provide for a feature of *a first medicine container positioned so as to wirelessly communicate with a second container for storing a second medicine*

(b) The motivations for (a) would be

(i) to "enhance the security of the system" and

(ii) "increase accuracy of determining compliance of the patients with the prescribed schedule of taking medicine."

[Second Office Action, pages 4-5].

Appellants have carefully reviewed the record, as well as the Reber and Andrews references cited by the Examiner, without finding a motivation anywhere in the record that suggests the desirability of combining or modifying the cited references in the manner proposed by the Examiner.

Reber and Andrews Are Not Analogous Art

Appellants respectfully submit that the Reber and Andrews references are not analogous art. It is a described object of the Andrews system to provide for the security of an electronic device by signaling that a security violation has occurred when a remote unit is not within a selected proximity of the electronic device. [Column 1, lines 40-47].

In contrast, Reber is directed to communication systems and methods for aiding compliance of an individual with a prescription, including the use of a medical communication apparatus and one or more medicine containers. [See, *e.g.*, Column 1, lines 34-61; Column 2, line 38 to Column 3, line 8].

There is nothing in either Andrews or Reber, in the knowledge generally available to one having ordinary skill in the art, or in the problem to be solved, that would suggest the selection of Andrews to modify the medical communication system of Reber in the manner proposed by the Examiner.

The Asserted Motivations Are Not Shown in the Cited References

The Examiner's asserted motivations to modify Reber in light of Andrews to (i) "enhance security" or (ii) "increase accuracy of determining compliance of the patients with the prescribed schedule of taking medicine" are not supported by the references.

Andrews describes a method and system for providing security for an electronic device which signal that a security violation has occurred when a remote unit is not within a selected proximity of an electronic device. [Column 1, lines 40-47]. In fact, Andrews is concerned primarily with securing against the

theft of devices such as portable computers, and is devoid of a hint or suggestion of medicine containers, the theft of medicine containers, or the "security" of medicine containers or systems involving medicine containers. [See, *e.g.*, Column 1, lines 5-64].

Reber is also devoid of any suggestion of how the proximity of two medicine containers is related to "security" or "a security violation." Thus, neither Andrews nor Reber suggests either (i) the desirability of enhancing the security of containers for storing medicine generally, or (ii) the desirability of determining whether two containers for storing medicine are positioned "within a selected proximity" of one another specifically.

In contrast, according to some embodiments of the present invention, an entity (*e.g.*, an insurance company) may track a party's compliance to a medicine schedule merely by monitoring whether the medicine containers are being kept together. [See, *e.g.*, Specification, page 9, lines 20-23]. Some embodiments of the present invention provide the benefit that two containers positioned so as to communicate with one another may communicate various types of information to one another, and in some embodiments may be "self regulating." [See, *e.g.*, Specification, page 9, lines 5-20]. Appellants respectfully submit that there is nothing in increasing and / or monitoring compliance with a medicine schedule that would suggest to one having ordinary skill the proposed modification of Reber in light of the method for "providing security" described in Andrews.

Appellants also respectfully submit that there is nothing presented by the Examiner, or identifiable in the record, to support the Examiner's conclusory statements that it would have been obvious to modify Reber in light of the

Andrews system in order to "increase accuracy of determining compliance of the patients with the prescribed schedule of taking medicine" in the manner asserted by the Examiner.

As described in Reber, compliance depends solely upon a user-initiated action at the "medical communication apparatus." [See, *e.g.*, Column 8, lines 50-62; Column 5, lines 32-40; Column 3, lines 9-12]. The Examiner does not indicate any evidence of record that would suggest to one of ordinary skill that determining the proximity of two devices is at all relevant to determining compliance with a "prescribed schedule of taking medicine," much less that determining whether two medicine containers are able to would "increase accuracy of determining compliance" in the Reber system, as proposed by the Examiner.

Further, as discussed above, the Reber system already discloses communication between the "medical communication apparatus" and the "medicine containers." There is nothing in the cited references that would additionally suggest the desirability of modifying the Reber system to provide for a first container for storing medicine capable of communicating with a second container for storing medicine. Such a modification would provide for unnecessary complexity in the Reber system without a substantiated motivation in the prior art of record. The Andrews system does not suggest any such communication between "medicine containers."

The Examiner provides no reasoned explanation as to why the asserted motivations, even if supported in the record, would have led one having ordinary skill in the art to provide for the claimed features in particular.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber and Andrews would be advantageous. The Examiner does not provide a reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **3**. Appellants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Thus the Examiner has not shown a motivation in the prior art of record to combine the references in any manner that renders any claim of GROUP I obvious. Accordingly, Appellants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness of independent Claim **3**. The rejection fails for at least this reason.

4.5.6. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of Claim **3**.

For at least these reasons, all of the claims of GROUP I are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

5. GROUP II

GROUP II includes dependent Claim **4** and Claims **5 and 6** dependent therefrom.

Claim **4** depends from independent Claim **3** (GROUP I). Thus, all of the claims of GROUP II are patentable for the same reasons that the claims of GROUP I are patentable.

The rejection of Claim **4** is further flawed because the Examiner has erroneously concluded that a claim depending from a non-statutory independent claim is *per se* non-statutory subject matter.

The rejection of Claim **4** is also flawed because the Examiner has failed to provide any finding as to why a claim that recites *receiving a signal from a device* comprises non-statutory subject matter.

The rejection of Claim **4** is also flawed because the Examiner has failed to provide a *prima facie* case that that it would have been obvious to provide for a feature of *a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate.*

5.1. Claim 4

Claim **4** includes all of the limitations of independent Claim **3** (GROUP I), from which Claim **4** depends.

Claim **4** is directed to a method comprising receiving a signal. The method also includes determining, based at least in part on the signal, whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine.

Claim **4** also recites that the received signal is received from a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate.

Claims **5 and 6** depend from Claim **4**. Accordingly, although Claim **4** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claims **5 and 6**.

5.2. Advantages of Claim 4

The embodiment of Claim 4 provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **4** are discussed above in Section 4.2 above with respect to Claim **3**.

The method of Claim **4** is further advantageous in that it provides for *receiving a signal from a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate*. Thus, some embodiments advantageously provide for a monitoring device. According to some embodiments, one of the medicine containers may serve as a "compliance monitoring device" that monitors/tracks, for example, the

proximity of the medicine containers (e.g., whether the medicine containers are positioned so as to communicate), each time a party takes a medicine, the dose of each medicine taken by a party, etc. Alternatively, a separate central monitoring device (e.g., a device that does not function as a medicine container) may be employed as a compliance monitoring device to monitor/track the above information. [Specification, page 10, lines 14-20].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

5.3. The Claims of GROUP II are Statutory

Claim **4** was merely listed as being rejected under § 101. No other discussion of the subject matter of Claim **4** was provided. The terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable. The Examiner erroneously concluded that the § 101 determination for an independent claim automatically carries through all of its dependent claims, regardless of whatever limitations may be recited in the dependent claims.

The proper legal standard for statutory subject matter was not applied to the rejected claims.

Applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

5.3.1. The Basis for the Rejection

As best as Appellants understand the rejection of the claims of GROUP II as being directed to non-statutory subject matter, the basis for that rejection is identical to that noted in Section 4.3.1 above. As discussed in Section 4.3.5 above with respect to Claim **3**, the Examiner did not even properly review the subject matter of Claim **3** (e.g., the Examiner failed to address the limitations of the claim or otherwise construe it) in applying the erroneous legal standard.

No analysis of the scope of Claim **4** is indicated.

In fact, the Examiner erroneously concludes: "Because the independently claimed invention is directed to an abstract idea which does not recite a limitaion [sic] in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101...." [Second Office Action, page 3 (emphasis added)].

The Examiner thus asserts that regardless of whatever limitations may appear in a dependent claim, the dependent claim is unpatentable under § 101 if its independent claim is unpatentable under § 101. This is clearly incorrect.

Appellants acknowledge that a claim depending from a rejected claim may objected to as a matter of form, but it does not follow that such a claim is automatically non-statutory under § 101. For instance, according to the Examiner's novel theory of claim construction and § 101 analysis, even if the Examiner's legal standard were correct (which Appellants dispute), the reciting of a "limitaion [sic] in the technological arts" in a dependent claim still would not make that dependent claim statutory subject matter if the independent claim is non-statutory.

Clearly, claims of differing scope must be evaluated individually for their compliance with § 101.

The Examiner has failed to evaluate the patentability of the claims of GROUP II under § 101 at all. The rejection is therefore arbitrary.

5.3.2. The Claims Meet the Standard for Statutory Subject Matter

For at least the reasons stated with respect to GROUP I in Section 4.3.3 on page 30, Claim **4** meets the standard for statutory subject matter—it produces a useful, concrete and tangible result.

In addition, Claim **4** explicitly *receives a signal from a device.* The Examiner has not provided any finding as to why a claimed method including *receiving a signal from a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate* fails to meet the threshold utility requirement or to provide a practical application—i.e., a useful, concrete and tangible result.

5.4. No Prima Facie Showing of Obviousness of GROUP II

The Examiner has based a rejection of GROUP II on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP II.

The claims of GROUP II are not obvious in light of the cited references for at least the reasons stated in Section 4.5 on page 47. In particular, there is no suggestion of a container for storing medicine capable of communicating with

another such container, much less determining whether a container was positioned so as to be able to communicate with another container.

Further, there is no suggestion in the cited references of *a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate.* Neither reference suggests such functionality, much less a device for such a purpose.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of any claim of GROUP II.

Accordingly, for at least those reasons, the claims of GROUP II are patentable.

SEPARATE ARGUMENT OF PATENTABILITY

6. GROUP III

GROUP III includes dependent Claim **12** and Claims **13 and 14** dependent therefrom.

Claim **12** depends from independent Claim **3** (GROUP I). Thus, all of the claims of GROUP III are patentable for the same reasons that the claims of GROUP I are patentable.

The rejection of Claim **12** is further flawed because the Examiner has erroneously concluded that a claim depending from a non-statutory independent claim is *per se* non-statutory subject matter.

The rejection of Claim **12** is also flawed because the Examiner has failed to make a prima facie case that *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal* is indefinite.

6.1. Claim 12

Claim **12** includes all of the limitations of independent Claim **3** (GROUP I), from which Claim **12** depends.

Claim **12** is directed to a method comprising receiving a signal. The method also includes determining, based at least in part on the signal, whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine.

Claim **12** also further includes determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

Claims **13 and 14** depend from Claim **12**. Accordingly, although Claim **12** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claims **13 and 14**.

6.2. Advantages of Claim 12

The embodiment of Claim **12** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **12** are discussed above in Section 4.2 above with respect to Claim **3**.

The method of Claim **12** is further advantageous in that it provides for *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine.* For example, an insurance company may monitor at least one party's compliance with a requirement for taking multiple medicines and / or at least one party's compliance with a requirement that two or more medicine containers be kept within a certain distance or range of one another (e.g., a "proximity requirement"). Claim **12** advantageously provides for determining whether, based on the same received signal, two containers were positioned so as to wirelessly communicate and determining whether at least one

party complied with a schedule for taking two medicines. [Specification, page 8, lines 22-27].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

6.3. The Claims of GROUP III are Statutory

Like Claim **4** (GROUP II) (discussed in Section 5.3 on page 66), Claim **12** was merely listed as being rejected under § 101. No other discussion of the subject matter of Claim **12** was provided. The arguments made in Section 5.3 with respect to the failure of the Examiner to consider the scope of dependent claims (by erroneously concluding that claims dependent from a non-statutory independent claim must be non-statutory) are equally applicable to the claims of GROUP III.

The terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable. The proper legal standard for statutory subject matter was not applied to the rejected claims.

The Examiner has failed to evaluate the patentability of the claims of GROUP III under § 101 at all. The rejection is therefore arbitrary.

For at least the reasons stated with respect to GROUP I in Section 4.3.3 on page 30, Claim **12** meets the proper legal standard for statutory subject matter—it produces a useful, concrete and tangible result.

6.4. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP III. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP III are definite.

The claims of GROUP III are definite for at least the reasons stated in 4.4 on page 36 with respect to GROUP I. The terms *determining*, *container for storing...medicine*, *signal* and *receiving a signal* are reasonably clear in meaning.

The Examiner asserts that "'determining a level to which a party complied with a medicine schedule based on the information (signal)' is confusing, because it is not indicated if the party took this medicine." [Second Office Action, page 2].

Although Claim **12** does not recite "determining a level...," it does recite *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine.* As best understood by Appellants, it is the terms related generally to determining compliance with a schedule that the Examiner believes are fatally ambiguous. Accordingly, Appellants address any possible rejection of Claim **12** on that basis.

Appellants do not understand at all the reasoning behind the Examiner's finding that determining compliance with a schedule for taking medicine is "confusing because it is not indicated if the party took this medicine."

for taking the medicine merely qualifies the type of schedule; it does not introduce any ambiguity as to what steps need be performed to infringe the claim. Accordingly, reciting *a schedule for taking the first medicine and the second*

medicine does not introduce any ambiguity as to what is required by the claim. The step of determining compliance is understandable on its face and in light of the Specification. The Specification includes numerous examples of how compliance with a medicine schedule may be determined. One skilled in the art would understand that in order to infringe the pending claim, one need only determine, based at least in part on the received signal, whether at least one party has complied with a schedule for taking two medicines. The law regarding § 112(P2) asks no more.

The Examiner has made no finding that the ordinary meaning of determining compliance with a schedule for taking medicine is fatally unclear, or that the step is ambiguous when considered properly in light of the Specification. Accordingly, for at least those reasons, the Examiner has failed to establish a prima facie case of indefiniteness of any claim of GROUP III.

Accordingly, for at least those reasons, the claims of GROUP III are patentable.

SEPARATE ARGUMENT OF PATENTABILITY

7. GROUP IV

GROUP IV includes independent Claim **34** and Claim **35** dependent therefrom.

The rejection of GROUP IV is flawed because the Examiner has not made a *prima facie* case that any claim of GROUP IV is directed to non-statutory subject matter:

- each claim produces a useful, concrete and tangible result;
- the Examiner erroneously believes that if a claimed step may be performed mentally, the claim as a whole must be non-statutory subject matter; and
- contrary to law, the Examiner applies a novel, unspecified and unsupported legal requirement that a claim must recite a "limitation in the technological arts."

The rejection of GROUP IV is flawed because the Examiner has not made a prima facie case of indefiniteness:

- contrary to law, the Examiner's rejection apparently lies on the mere fact that the Examiner finds the scope of the claims is broad; and
- the Examiner has made no reasoned findings as to why one of ordinary skill would find the scope of any claim is unreasonably unclear when read, as required, in light of the specification.

The rejection of GROUP IV is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP IV to be disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP IV cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP IV obvious.

7.1. Independent Claim 34

Claim **34** is directed to a method for rewarding a party for complying with a medicine schedule. The method includes receiving information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period. The method also includes determining a level to which the party complied with a medicine schedule based on the information, and rewarding the party based on the level.

Claim **35** depends from Claim **34**.

Accordingly, although independent Claim **34** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claim **35**.

7.2. Advantages of Claim 34

The embodiment of Claim **34** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

In general, as discussed in the present application, the method of Claim **34** is advantageous in that it provides for *determining a level to which a party complied with a medicine schedule based on information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period.* The present invention recognizes, in some embodiments, that some types of entities (e.g., an insurance company) may monitor a party's compliance to a medicine schedule by monitoring whether a medicine container was able to communicate with another medicine container during a predetermined period. [See, *e.g.*, Specification, page 11, line 31 to page 12, line 2]. For example, a compliance monitoring device may provide information to a controller (e.g., employed by the insurance company) that includes, for example, information regarding the proximity of medicine containers (e.g., the times the medicine containers were separated and could not communicate, the times the medicine containers were together and could communicate, etc.). Based on such information (e.g., a code), the controller may determine a level of compliance with a medicine schedule (e.g., a percentage indicator), including compliance

with a proximity requirement. [See, e.g., Specification, page 10, line 21-26; page 36, line 27 to page 37, line 31].

Claim **34** is further advantageous in that it provides for *rewarding a party based on the level to which the party complied with the medicine schedule.* For example, in some embodiments, to provide a "positive incentive" for a party to comply to a medicine schedule, embodiments of the invention allow an insurance company, a doctor, a pharmacist or any other relevant entity to conveniently monitor the party's compliance to the medicine schedule (e.g., by monitoring the proximity of two or more medicine containers that may communicate with one another), and to reward the party based on a level to which the party complies with the medicine schedule. [See, e.g., Specification, page 12, lines 3-8; page 21, line 29 to page 22, line 4; page 49, line 17 to page 50, line 14].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

7.3. <u>The Claims of GROUP IV are Statutory</u>

The proper legal standard for statutory subject matter was not applied to the rejected claims. In fact, applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

In addition, the terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable.

7.3.1. The Basis for the Rejection

As best as Appellants understand the rejection of the claims of GROUP IV as being directed to non-statutory subject matter, the basis for that rejection is one or more of:

- the claims do not recite "a limitaion [sic] in the technological arts" [Second Office Action, page 2]; and
- all of the steps of the claims "are abstract ideas which can be performed mentally without interaction of a physical structure" [Second Office Action, page 2].

To the extent the rejection actually applied a standard that requires additional criteria or otherwise departs from the requisite legal analysis under § 101, the rejection is flawed.

Further, to the extent the rejection is based on a standard that departs from the policy of the U.S. Patent and Trademark Office without a rational basis, that standard is arbitrary.

The proper legal standard for statutory subject matter is provided in Section 4.3.2 on page 28.

7.3.2. The Claims Meet the Standard for Statutory Subject Matter

The claims of GROUP IV produce a useful, concrete and tangible result.

The claims of GROUP IV include the feature of *rewarding a party based on the level to which the party complied with a medicine schedule.* Thus, the claims of GROUP IV allow for an entity, such as an insurance company, to provide a "positive incentive" for a party to comply with a medicine schedule.

Rewarding thus results in a useful, concrete and tangible result – a benefit to a party that may be used as an incentive to encourage compliance.

The claims of GROUP IV also include the features of *determining a level to which a party complied with a medicine schedule based on information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period.* Thus, the claims of GROUP IV allow for an entity, such as an insurance company, to determine a degree or level to which a party complied with a medicine schedule. In particular, the determination is based on whether one medicine container was able to communicate with at least one other medicine container during a predetermined time period. [See, e.g., Specification, page 10, line 21-26; page 36, line 27 to page 37, line 31].

Such a determination thus results in a useful, concrete and tangible result – an assessment of the level of compliance of a party with a medicine schedule, that may be relied upon by, for example, an insurance company, in providing a reward to the party.

This determination, therefore, is not an abstract, disembodied result, but instead has a specific meaning and corresponds to a useful, concrete or tangible result – determining a level of compliance with a medicine schedule. The processes claimed can by no stretch of the imagination be classified as "abstract ideas," and are thus properly defined statutory processes.

It is also worth noting that the requirement for a "useful invention" is to be evaluated for the invention, and is not dependent on the breadth of the claims. Thus, if one species of an invention claimed as a genus is found to be "useful", utility for the genus is established. Raytheon Co. v. Roper Corp., 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) ("When a properly claimed invention meets at least one stated objective, utility under § 101 is clearly shown."). Utility is to be evaluated in a simple "yes" or "no" fashion (i.e., does the invention as claimed possess or not possess utility). There is no subjective test for "utility" that must be deemed to be commensurate with the breadth of the claims being sought to be patented.

Moreover, the scope of the claims as presented encompass a variety of specific implementations of the claimed processes. Certain of these embodiments implicate the use of processors and / or containers that are capable of communication in the processes. Claim **34** recites a container for storing medicine. Such container- and device-based species clearly fall within the broader generic definition of the claimed processes. Given that utility for a genus may be established through a recitation of utility of a species within that genus, a rejection that the generically claimed processes lack utility is clearly improper.

7.3.3. The Examiner Applied a Test Which is Contrary to Law

As discussed in Section 4.3.4 on page 33, there is no authority requiring claims to "recite a limitaion [sic] in the technological arts," whatever that may mean. The Examiner does not indicate any relevant case law that puts forth such a test.

Also, as discussed in Section 4.3.4, a claim need not preclude an embodiment performed mentally, and a claim need not recite "interaction of a physical structure.

7.3.4. The Examiner Has Not Even Applied His Test to GROUP IV

Other than the conclusory statement that the claims fail to satisfy the standard(s) described above, there is no explanation of why the particular claims of GROUP IV do not "recite a limitaion [sic] in the technological arts."

The Examiner has not set forth in the record any factual findings, such as:

- how various claim terms of Claim **34** (or any other claim of GROUP IV) have been construed (e.g., the terms *determining a level to which the party complied with a medicine schedule, container for storing a first medicine, rewarding the party based on the level*); and
- what exactly constitutes "a limitaion [sic] in the technological arts."

There is no finding, for example, in support of the Examiner's assertion that *rewarding the party based on the level* is an "abstract idea."

Absent any findings, the result of the test purportedly applied cannot be evaluated, and must be considered arbitrary.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP IV is non-statutory.

7.4. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP IV. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP IV are definite.

7.4.1. Rejections Are Not Supported by Any Evidence

The Examiner's § 112(P2) rejection is conclusory and without supporting evidence in the record.

The Examiner contends, without any supporting evidence, that one having ordinary skill in the art, with access to the written disclosure, would remain unreasonably confounded by the meanings of the words *information* and *determining a level to which the party complied with a medicine schedule based on the information.*

The Examiner has not provided any evidence in support of the assertions that terms in Claim **34** would be unreasonably unclear or "confusing" in scope. There is no evidence that the plain meaning of any term is "confusing" or not clear to one skilled in the art. The Examiner does not provide any indication, for example, that any term is unfamiliar, contrary to accepted use, or an objectionably

ambiguous term of degree. Appellants submit that the plain meaning of all of the terms in Claim **34** would be clearly understood by one skilled in the art.

Further, the Examiner has not provided any evidence that terms in Claim **34** would be unclear or "confusing" when considered, as required, in light of the disclosure in the Specification.

In fact, there is no indication that the Examiner has considered any claim in light of the Specification, as is required. The failure to make a finding that Claim **34** is indefinite when read in light of the Specification is a failure to establish a *prima facie* case of indefiniteness. Any rejection under § 112(P2) would fail for at least this reason.

There is no indication that the Examiner has determined the level of ordinary skill in the art, or considered Claim **34** as one having ordinary skill in the art would in light of the Specification, as is required. The failure to determine the level of ordinary skill in the art (and the accompanying failure to consider the specification from this viewpoint) is a failure to establish a *prima facie* case of indefiniteness. Any rejection under § 112(P2) would fail for at least this reason.

7.4.2. Claims Meet the Proper Legal Standard

The claims of GROUP IV are definite for at least the reasons stated in 4.4 on page 36 with respect to GROUP I. The terms *determining* and *container for storing...medicine* are reasonably clear in meaning.

The terms *information* and *receiving information* are reasonably clear in meaning. The Examiner apparently does not agree, for reasons that are not clear:

"Also, it is not clear what does the term 'information (signal)' encompass." [Second Office Action, page 2].

The Examiner appears to equate *signal* (e.g., Claim **3**) and *information*, but does not provide any explanation for this equivalence. Regardless, the reasonable clarity of *signal* to one skilled in the art is discussed in Section 4.4.3 on page 11 with respect to Claim **3** (GROUP I).

Further, Appellants submit that the plain meaning of *information* would be understood by those skilled in the art. The Examiner's objection seems to be merely that the term may be broad in scope (e.g., may be embodied in various forms)—this has nothing to do with indefiniteness, as discussed in Section 4.4.3 on page 11 with respect to Claim **3** (GROUP I).

Further, even if the word *information*, alone, would be unclear to one skilled in the art even in light of the Specification, which Appellants dispute, the word does not appear by itself in the claim. To the contrary, it is followed by a detailed description of the type of *information*: *regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period*. This is unambiguous, and the Examiner does not assert otherwise. With this explicit qualification of the term *information*, there is no rational basis for the Examiner's alleged uncertainty as to what *information* may "encompass."

The Examiner also asserts that "'determining a level to which a party complied with a medicine schedule based on the information (signal)' is confusing, because it is not indicated if the party took this medicine." [Second Office Action, page 2].

Appellants do not understand at all the reasoning behind the Examiner's finding that determining a level of compliance with a schedule for taking medicine is "confusing, because it is not indicated if the party took this medicine."

It is not necessary to determine if a party took his medicine in order to determine a level of compliance. It is not necessary to indicate that a party did or did not take medicine. Clearly, neither is required by the claim. Neither has anything to do with the ability of one skilled in the art to reasonably comprehend the legal scope of *determining a level to which the party complied with a medicine schedule*. One having ordinary skill would easily understand from the plain claim language that it is not required to determine whether "the party took this medicine." Determining the level to which the party complied is based, as clearly recited, on *information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container during a pre-determined time period.*

The Specification includes numerous examples of how compliance with a medicine schedule may be determined based on the recited information. The step of *determining a level to which the party complied with a medicine schedule based on the information* is thus understandable on its face and also in light of the Specification. The law regarding § 112(P2) asks no more.

The Examiner has made no finding that the ordinary meaning of *determining a level of compliance with a medicine schedule* is fatally unclear. The Examiner has made no finding that such a step is ambiguous when considered in light of the Specification. Again, the Examiner seems merely to be

requiring more detail in the claim without any reasoned finding that the step is ambiguous.

Claim **34** is Not Broader than the Disclosure

The Examiner has not made any finding or assertion that any claim is not adequately described or enabled by the Specification.

To the extent that the Examiner is holding that Claim **34** is broader than the disclosure because it fails to be limited to what is enabled and / or described in the disclosure, such rejections are more properly considered under the first paragraph of 35 U.S.C. § 112 than under the second paragraph. Robins, 429 F.2d 452, 456-57, n. 8 (C.C.P.A 1970) (citing In re Halleck, 422 F.2d 911 (C.C.P.A 1970); In re Borkowski, 422 F.2d 904 (C.C.P.A. 1970); and In re Wakefield, 422 F.2d 897 (C.C.P.A. 1970)); see also, MPEP § 2174.

To the extent the Examiner intended a rejection under the first paragraph of § 112, the rejection must be reversed. The Specification contains at least one statement of the embodiment claimed in Claim **34**. [See, Specification, page 5, lines 9-14]. Further, the sufficiency of the Specification to satisfy the "best mode" requirement of § 112 or to enable one skilled in the art to practice Appellants' process as broadly as it is claimed has not been questioned by the Examiner.

Accordingly, the claims are not broader than the disclosure, and there are no grounds for a rejection under 35 U.S.C. § 112, first paragraph. See, Robins, 429 F.2d at 456.

Accordingly, the Examiner has not set forth a prima facie case of indefiniteness of any claim of GROUP IV.

7.5. No Prima Facie Showing of Obviousness of GROUP IV

The Examiner has based a rejection of GROUP IV on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP IV.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

7.5.1. No showing that the References Suggest *determining a level to which a party complied with a medicine schedule based on information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period*

The Examiner has not shown that the cited references, alone or in combination, suggest *determining a level to which a party complied with a medicine schedule based on information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period.*

Factual Evidence

The Examiner has made no finding even remotely related to determining compliance with a medicine schedule based on whether a first container was able to communicate with a second container.

The closest the Examiner comes are the following statements:

> Reber et al. and Andrews teach all the limitations [of Claim 34] except a server adapted to: receive the data output by the compliance monitoring device; and reward at least one party based on the received data. Brown teaches a computerized reward system and method for encouraging in a health management program, comprising a server for receiving the compliance data, and wherein a compliance data on individuals is evaluated, and the reward to be given to the compliant individual. (Abstract; column 3, lines 18-60).

[Second Office Action, pages 6-7].

No further reasoning is provided for the Examiner's interpretation of the prior art.

These Findings Have No Support in the Record

Nothing in the Examiner's statements of record approaches substantial evidence in the prior art of the recited features; the statements cannot support a *prima facie* case of obviousness.

In order to establish a *prima facie* case that the combination of Reber, Andrews and Brown provides for all the features of the claims of GROUP IV, the Examiner must provide substantial evidence that the proposed combination would teach or suggest determining a level of compliance based specifically on whether two containers for storing medicine were able to communicate. The Examiner has not even purported to make any such finding.

The Examiner apparently relies on the proposed combination of Reber and Andrews for teaching all of the features of Claim **34** except *determining a level of compliance with a medicine schedule* and *rewarding based on the level.* For the reasons stated in Sections 4.5.4 and 4.5.5 above, Appellants submit that containers for storing medicine capable of communication with one another are not taught or suggested by the evidence of record, nor is the determining of whether such containers were positioned so as to communicate.

None of the references teaches or suggests any such information; they cannot suggest determining a level of compliance based on such information. The cited references are devoid of a hint or suggestion of how the ability of two medicine containers to communicate is at all relevant to a party's compliance with a medicine schedule. As the cited references do not teach or suggest such information, or the desirability of such information, even in combination, the references cannot teach or suggest determining a party's compliance based on such information.

Based on our understanding of the record, the Examiner relies on Brown and / Reber as somehow suggesting all conceivable bases for determining a level of compliance with a medicine schedule. Appellants dispute that the cited references may be so interpreted. Clearly, Reber suggests only acknowledgement of compliance that is based on a user-initiated action to indicate the user has taken medicine. Brown discloses only determining compliance based on monitored physiological data and / or answers by the user to questions / prompts.

There is no teaching or even suggestion of determining a level of compliance with a medicine schedule based specifically on whether a container

for storing medicine was able to communicate with another container for storing medicine, much less rewarding a party based on a level of compliance that is determined specifically in this manner. The Examiner has provided no evidence suggesting otherwise.

7.5.2. No Showing of a Proper Motivation to Modify the References

The Examiner has not shown a motivation in the prior art of record to modify and / or combine the cited references in the manner proposed by the Examiner, or in any other manner that renders the claims obvious.

The proper legal standard for establishing a motivation to modify / combine references is discussed in Section 4.5.5 above. The Examiner has failed to meet this standard.

No Substantial Evidence of a Motivation to Combine or Modify

The Examiner has proposed that one of ordinary skill in the art at the time the invention was made would have modified or combined the purported prior teachings of Andrews, Reber, and Brown As best understood by Appellants, the Examiner asserts the following to be true with respect to independent Claim **34**:

(a) It would have been obvious to one of ordinary skill in the art to modify a combination of Reber and Andrews in light of Brown to provide for determining a level of compliance with a medicine schedule based on whether two medicine containers were able to communicate during a

pre-determined time period and to provide for rewarding a party based on this level; and

(b) The motivations for (a) would be

(i) to "enhance the capability of the system" and

(ii) "stimulate patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately."

[Second Office Action, page 7].

The Asserted Motivations Are Not Shown in the Cited References

Appellants have carefully reviewed the record, as well as the Reber and Andrews references cited by the Examiner, without finding a motivation anywhere in the record that suggests the desirability of combining or modifying the cited references in the manner proposed by the Examiner.

There is nothing presented by the Examiner, or identifiable in the record, to support the Examiner's conclusory statements that it would have been obvious to modify Reber in light of the Andrews and / or Brown systems in order to (i) "enhance the capability of the system"; or (iii) "stimulate patients to comply with health management program" in the manner asserted by the Examiner.

To "enhance the capability of the system" is a mere conclusory and baseless statement that it is always obvious to improve a prior art system. This is not a proper finding supporting any particular modification. Only Appellants' disclosure suggests that the recited features are advantageous.

The Examiner does not indicate any evidence of record that would suggest to one of ordinary skill that determining the proximity of two devices is at all relevant to determining compliance with a "health management program," "stimulating patients," much less that determining whether two medicine containers are able to communicate (or rewarding based on such a determination) would "enhance the capability," "stimulate patients to comply," or somehow assist in the treatment of patients in the Reber system, as proposed by the Examiner.

The Examiner provides no reasoned explanation as to why the asserted motivations, even if supported in the record, would have led one having ordinary skill in the art to provide for the claimed features in particular.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber, Andrews and/or Brown would be advantageous. The Examiner does not provide any reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **34**. Applicants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews and/or Brown use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Thus the Examiner has not shown a motivation in the prior art of record to combine the references in any manner that renders any claim of GROUP IV obvious. Accordingly, Appellants respectfully submit that the Examiner has

failed to establish a *prima facie* case of obviousness of independent Claim **34**. The rejection fails for at least this reason.

7.5.3. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP IV.

For at least these reasons, all of the claims of GROUP IV are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

8. GROUP V

GROUP V includes independent Claim **36** and Claim **37** dependent therefrom.

The rejection of GROUP V is flawed because the Examiner has not made a *prima facie* case of indefiniteness of any term and, contrary to law, the Examiner's rejection apparently lies on the mere fact that an article of manufacture claim includes functional language.

The rejection of GROUP V is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP V to be disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP V cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP V obvious.

8.1. Independent Claim 36

Claim **36** is directed to a computer program product comprising a medium readable by a computer. The computer-readable medium has program code adapted to obtain information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period. The medium also has program code adapted to determine a level to which the party complied with a medicine schedule based on the information, and program code adapted to determine a reward for the party based on the level.

Claim **37** depends from Claim **36**.

Accordingly, although independent Claim **36** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claim **37**.

8.2. Advantages of Claim 36

The embodiment of Claim **36** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

The advantages of Claim **36** are discussed with respect to Claim **34** in Section 7.2 on page 77.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

8.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP V. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP V are definite.

Claim **36** includes terms that are identical or substantially similar to terms that the Examiner found "confusing" or "not clear" in Claim **34**. [Second Office Action, page 2]. The arguments made in Section 7.4 on page 83 with respect to those terms and to the Examiner's failure to make appropriate findings or establish a prima facie case of indefiniteness are equally applicable to Claim **36**.

In summary, the terms *container for storing...medicine, receiving information*, and *determining a level to which the party complied with a medicine schedule based on the information* are all reasonably clear based on their plain meanings and also when considered in light of the Specification.

The Examiner also asserts that the claims of GROUP V "are confusing, because they reffer [sic] to a computer program product while describing method steps." [Second Office Action, page 3].

Appellants do not understand this rationale at all. Appellants respectfully request additional guidance from the Examiner in the Examiner's Answer.

The Examiner may have misread the claims. Claim **36** does not even recite "method steps."

Claim **36** clearly recites program code elements of the computer-readable medium included in the computer program product. Defining subject matter by

the function it is capable of performing is a conventional drafting technique. Each claimed program code element is adapted for particular functionality. This would easily be understood by one skilled in the art.

Of course, there is nothing intrinsically wrong in defining something by what it does rather than by what it is. See In re Hallman, 655 F.2d 212 (C.C.P.A. 1981). The reciting of functional language in a product claim does not automatically render the claim indefinite. Claim **36** is reasonably defined by both what it is (a computer-readable medium having program code) and by what the program code of that medium is capable of doing (the recited functionality).

Accordingly, the Examiner has not set forth a prima facie case of indefiniteness of any claim of GROUP V.

8.4. No Prima Facie Showing of Obviousness of GROUP V

The Examiner has based a rejection of GROUP V on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP V.

Claim **36** recites features substantially similar to those recited in Claim **34**. The Examiner has failed to establish a *prima facie* case of obviousness for at least the reasons discussed in Section 7.5 above. For example, there is no teaching in the art of determining a level of compliance based on whether two medicine containers were able to communicate during a pre-determined period or rewarding based on such information, nor is there any suggestion of the desirability of providing for any such features.

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of any claim of GROUP V.

For at least these reasons, all of the claims of GROUP V are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

9. GROUP VI

GROUP VI includes independent Claim **38**.

The rejection of GROUP VI is flawed because the Examiner has not made a prima facie case of indefiniteness.

The rejection of GROUP VI is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP VI to be disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP VI cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP VI obvious.

9.1. Independent Claim 38

Claim **38** is directed to an apparatus comprising means for obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period. The apparatus also includes means for rewarding a party based on the information.

9.2. Advantages of Claim 38

The embodiment of Claim **38** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

The advantages of Claim **38** are similar to those discussed with respect to Claim **34** in Section 7.2 on page 77. Claim **38**, however, does not require determining a level to which a party complied with a medicine schedule. A party may be rewarded based on the received information about the ability of two or more containers to communicate during a predetermined period of time. In some embodiments, a controller (e.g., operated by or on behalf of an insurance company) receives a code that represents proximity information collected by a compliance monitoring device.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

9.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP VI. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP VI are definite.

The Examiner did not clearly reject Claim **38** under § 112(P2).

Claim **38**, however, includes terms that are identical or substantially similar to terms that the Examiner found "confusing" or "not clear" in Claim **34**. [Second Office Action, page 2]. The arguments made in Section 7.4 on page 83 with respect to those terms and to the Examiner's failure to make appropriate findings or establish a *prima facie* case of indefiniteness are equally applicable to Claim **38**.

In particular, the terms *container for storing...medicine* and *means for obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period* are all reasonably clear based on their plain meanings and also when considered in light of the Specification.

To the extent that the Examiner intended to reject Claim **38** for indefiniteness, such a rejection cannot stand. The proper legal standard for definiteness was not applied to any claim of GROUP VI. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In

fact, applying the proper legal standard demonstrates that all claims of GROUP VI are definite.

Accordingly, the Examiner has not set forth a prima facie case of indefiniteness of any claim of GROUP VI.

9.4. No Prima Facie Showing of Obviousness of GROUP VI

The Examiner has based a rejection of GROUP VI on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP VI.

Claim **36** recites features substantially similar to those recited in Claim **34**. The Examiner has failed to establish a *prima facie* case of obviousness for at least the reasons discussed in Section 7.5 above. For example, there is no teaching in the art of determining whether two medicine containers were able to communicate during a pre-determined period.

Consequently, the cited references cannot teach or suggest rewarding a party based on such information, nor is there any suggestion of the desirability of providing for any such features.

To the extent that the Examiner is relying upon Brown as teaching any reward based on any type of information, Appellants traverse any such interpretation of Brown, which is unsupported by the record

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of any claim of GROUP VI.

For at least these reasons, all of the claims of GROUP VI are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

10. GROUP VII

GROUP VII includes independent Claim **39** and Claims **40-42** dependent therefrom.

The rejection of GROUP VII is flawed because the Examiner has not made a prima facie case that any claim of GROUP VII is directed to non-statutory subject matter:

- each claim produces a useful, concrete and tangible result; and
- contrary to law, the Examiner applies a novel, unspecified and unsupported legal requirement that a claim must recite a "limitation in the technological arts."

The rejection of GROUP VII is flawed because the Examiner has not made a prima facie case of indefiniteness:

- contrary to law, the Examiner's rejection apparently lies on the mere fact that the Examiner finds the scope of the claims is broad; and
- the Examiner has made no reasoned findings as to why one of ordinary skill would find the scope of any claim is unreasonably unclear when read, as required, in light of the specification.

The rejection of GROUP VII is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP VII to be disclosed or suggested by any reference (or combination of references); and

- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP VII cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP VII obvious.

10.1. Independent Claim 39

Claim **39** is directed to a method comprising receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine. The method also includes determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based on the received signal.

Claims **40-42** depend from Claim **39**.

Accordingly, although independent Claim **39** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claims **40-42**.

10.2. Advantages of Claim 39

The embodiment of Claim **39** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

The method of Claim **39** is advantageous in that it provides for *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine.* For example, an insurance company may monitor at least one party's compliance with a schedule for taking multiple medicines. Claim **39** advantageously provides for determining, based on a signal received from a device that monitors whether two containers were positioned so as to communicate, whether at least one party complied with a schedule for taking two medicines. [Specification, page 8, lines 22-27].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

10.3. The Claims of GROUP VII are Statutory

The proper legal standard for statutory subject matter was not applied to the rejected claims. In fact, applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

In addition, the terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable.

10.3.1. The Basis for the Rejection

As best as Appellants understand the rejection of the claims of GROUP VII as being directed to non-statutory subject matter, the basis for that rejection is one or more of:

- the claims do not recite "a limitaion [sic] in the technological arts" [Second Office Action, page 2]; and
- all of the steps of the claims "are abstract ideas which can be performed mentally without interaction of a physical structure" [Second Office Action, page 2].

To the extent the rejection actually applied a standard that requires additional criteria or otherwise departs from the requisite legal analysis under § 101, the rejection is flawed.

Further, to the extent the rejection is based on a standard that departs from the policy of the U.S. Patent and Trademark Office without a rational basis, that standard is arbitrary.

The proper legal standard for statutory subject matter is provided in Section 4.3.2 on page 28.

10.3.2. The Claims Meet the Standard for Statutory Subject Matter

The claims of GROUP VII produce a useful, concrete and tangible result.

The claims of GROUP VII include the feature of *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine.* Thus, the claims of GROUP VII allow for an entity, such as an insurance company, to determine a degree or level to which a party complied with a medicine schedule for taking multiple medicines.

Such a determination thus results in a useful, concrete and tangible result – an assessment of the level of compliance of a party with a medicine schedule. Such a result may be relied upon by, for example, an insurance company, in providing a reward to the party.

This determination, therefore, is not an abstract, disembodied result, but instead has a specific meaning and corresponds to a useful, concrete or tangible result – determining compliance with a medicine schedule. The processes claimed can by no stretch of the imagination be classified as "abstract ideas," and are thus properly defined statutory processes.

It is also worth noting that the requirement for a "useful invention" is to be evaluated for the invention, and is not dependent on the breadth of the claims. Thus, if one species of an invention claimed as a genus is found to be "useful", utility for the genus is established. Raytheon Co. v. Roper Corp., 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) ("When a properly claimed invention meets at least one stated objective, utility under § 101 is clearly shown."). Utility is to be evaluated in a simple "yes" or "no" fashion (i.e., does the invention as claimed possess or not possess utility). There is no subjective test for "utility" that must be deemed to be commensurate with the breadth of the claims being sought to be patented.

Moreover, the scope of the claims as presented encompass a variety of specific implementations of the claimed processes. Certain of these embodiments implicate the use of devices, processors and / or containers that are capable of communication in the processes. For example, Claim **39** explicitly recites receiving a signal from a device. Such container- and device-based species clearly fall within the broader generic definition of the claimed processes. Given that utility for a genus may be established through a recitation of utility of a species within that genus, a rejection that the generically claimed processes lack utility is clearly improper.

10.3.3. The Examiner Applied a Test Which is Contrary to Law

As discussed in Section 4.3.4 on page 33, there is no authority requiring claims to "recite a limitaion [sic] in the technological arts," whatever that may mean. The Examiner does not indicate any relevant case law that puts forth such a test.

Also, as discussed in Section 4.3.4 on page 33, a claim need not preclude an embodiment performed mentally, and a claim need not recite "interaction of a physical structure.

10.3.4. The Examiner Has Not Even Applied His Test to GROUP VII

Other than the conclusory statement that the claims fail to satisfy the standard(s) described above, there is no explanation of why the particular claims of GROUP VII do not "recite a limitaion [sic] in the technological arts."

The Examiner has not set forth in the record any factual findings, such as:

- how various claim terms of Claim 39 (or any other claim of GROUP VII) have been construed (e.g., *receiving a signal from a device*, *determining a level to which the party complied with a medicine schedule*, *container for storing a first medicine*); and
- what exactly constitutes "a limitaion [sic] in the technological arts."

The method claimed clearly recites *receiving a signal from a device*. There is no reasoned finding, however, that *receiving a signal from a device* is an "abstract idea" and / or fails to recite "interaction with a physical structure." Thus, the Examiner has failed even to apply correctly the erroneous standard asserted.

Absent any findings, the result of the test purportedly applied cannot be evaluated, and must be considered arbitrary.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP VII is non-statutory.

10.4. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP VII. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP VII are definite.

The claims of GROUP VII are definite for at least the reasons stated in 4.4 on page 36 with respect to GROUP I. The terms *container for storing...medicine*, *signal* and *receiving a signal* are reasonably clear in meaning.

The Examiner asserts that "'determining a level to which a party complied with a medicine schedule based on the information (signal)' is confusing, because it is not indicated if the party took this medicine." [Second Office Action, page 2].

Although Claim **39** does not recite "determining a level...," it does recite *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine.* As best understood by Appellants, it is the terms related generally to determining compliance with a schedule that the Examiner appears to believe are fatally ambiguous. Accordingly, Appellants address any possible rejection of Claim **39** on that basis.

Appellants do not understand at all the reasoning behind the Examiner's finding that determining compliance with a schedule for taking medicine is "confusing because it is not indicated if the party took this medicine."

for taking the medicine merely qualifies the type of schedule; it does not introduce any ambiguity as to what steps need be performed to infringe the claim.

Accordingly, reciting *a schedule for taking the first medicine and the second medicine* does not introduce any ambiguity as to what is required by the claim.

The step of determining compliance is understandable on its face and in light of the Specification. The Specification includes numerous examples of how compliance with a medicine schedule may be determined. One skilled in the art would understand that in order to infringe the pending claim, one need only determine, based at least in part on the received signal, whether at least one party has complied with a schedule for taking two medicines. The law regarding § 112(P2) asks no more.

The Examiner has made no finding that the ordinary meaning of any term in the step for determining compliance with a schedule for taking medicine is fatally unclear. The Examiner seems merely to be requiring more detail in the claim without any reasoned finding that the step is ambiguous.

Accordingly, for at least those reasons, the Examiner has failed to establish a prima facie case of indefiniteness of any claim of GROUP VII.

10.5. No Prima Facie Showing of Obviousness of GROUP VII

The Examiner has based a rejection of GROUP VII on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP VII.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

10.5.1. No showing that the References Suggest *a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine*

For at least the reasons stated in Sections 4.5.4, 4.5.5 and 5.4, the cited Andrew and Reber references fail to teach or suggest *a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine*, and fail to properly support a motivation for providing for any such a feature.

10.5.2. No showing that the References Suggest *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal*

Consequently, the cited references, alone or in combination, cannot teach or suggest *determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on a signal received from such a device*, as generally recited in Claim **39**.

Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of GROUP VII.

10.5.3. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP VII.

For at least these reasons, all of the claims of GROUP VII are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

11. GROUP VIII

GROUP VIII includes dependent Claim **43** and dependent Claims **44-47** dependent therefrom.

All of the claims of GROUP VIII depend (directly or indirectly) from independent Claim **39** (GROUP VII). Thus, all of the claims of GROUP VIII are patentable for the same reasons that the claims of GROUP VII are patentable.

The rejection of the claims of GROUP VIII are further flawed because the Examiner has erroneously concluded that a claim depending from a non-statutory independent claim is *per se* non-statutory subject matter.

11.1. Claim 43

Claim **43** includes all of the limitations of independent Claim **39** (GROUP I), from which Claim **43** depends.

Claim **43** is directed to a method comprising receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine. The method also includes determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based on the received signal.

Claim **43** further includes determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

Claims **44-47** depend from Claim **43**.

Accordingly, although Claim **43** is referenced in the arguments below for simplicity, the arguments are equally applicable to Claims **44-47**.

11.2. Advantages of Claim 43

The embodiment of Claim **43** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **43** are discussed above in Section 10.2 on page 108 with respect to Claim **39**, from which Claim **43** depends.

Claim **43** is further advantageous in that it provides for *rewarding the at least one party if the at least one party has complied with the schedule for taking the first medicine and the second medicine.* For example, in some embodiments, to provide a "positive incentive" for a party to comply to a medicine schedule, embodiments of the invention allow an insurance company, a doctor, a pharmacist or any other relevant entity to conveniently monitor the party's compliance to the medicine schedule (e.g., by monitoring the proximity of two or more medicine containers that may communicate with one another), and to reward the party if the party complies with the medicine schedule. [See, e.g.,

Specification, page 12, lines 3-8; page 21, line 29 to page 22, line 4; page 49, line 17 to page 50, line 14].

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

11.3. The Claims of GROUP VIII are Statutory

Like Claim **4** (GROUP II) (discussed in Section 5.3 on page 66), Claim **43** was merely listed as being rejected under § 101. No other discussion of the subject matter of Claim **43** was provided. The arguments made in Section 5.3 on page 66 with respect to the failure of the Examiner to consider the scope of dependent claims (by erroneously concluding that claims dependent from a non-statutory independent claim must be non-statutory) are equally applicable to the claims of GROUP VIII.

The terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable. The proper legal standard for statutory subject matter was not applied to the rejected claims.

The Examiner has failed to evaluate the patentability of the claims of GROUP VIII under § 101 at all. The rejection is therefore arbitrary.

The claims of GROUP VIII produce a useful, concrete and tangible result. For at least the reasons stated with respect to Claim **39** (GROUP VII) in Section 10.3.2 on page 109, Claim **43** meets the proper legal standard for statutory subject matter—it produces a useful, concrete and tangible result.

Also, the claims of GROUP VIII include the feature of *rewarding the at least one party if the at least one party has complied with the schedule for taking the first medicine and the second medicine.* Thus, the claims of GROUP VIII allow for an entity, such as an insurance company, to provide a "positive incentive" for a party to comply with a medicine schedule. Rewarding thus results in a useful, concrete and tangible result – a benefit to a party that may be used as an incentive to encourage compliance.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP VIII is non-statutory.

For at least these reasons, the claims of GROUP VIII should be allowed.

SEPARATE ARGUMENT OF PATENTABILITY

12. GROUP IX

GROUP IX includes dependent Claim **48**.

All of the claims of GROUP IX depend (directly or indirectly) from independent Claim **39** (GROUP VII) and Claim **43** (GROUP VIII). Thus, all of the claims of GROUP IX are patentable for the same reasons that the claims of GROUP VII and GROUP VIII are patentable.

The rejection of the claims of GROUP IX is further flawed because the Examiner has not made a *prima facie* case of obviousness:

- the Examiner has not even attempted to show the limitation of *a first reward based on a distance between the first container and the second container* is disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without an adequate motivation supported by the record for making the proposed combinations.

12.1. Claim 48

Claim **48** includes all of the limitations of independent Claim **39** (GROUP VII) and Claim **43**.

Claim **48** further includes providing the at least one party with a first reward based on a distance between the first container and the second container.

Claim **48** further includes providing the at least one party with a second reward based on at lest one other indicator that the at least one party has complied with the schedule for taking the first medicine and the second medicine.

12.2. Advantages of Claim 48

The embodiment of Claim **48** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **48** are discussed above in Section 10.2 on page 108 with respect to Claim **39** and in Section 11.2 on page 119 with respect to Claim **43**.

Claim **48** is further advantageous in that it allows an entity (e.g., an insurance company) to provide two separate rewards, each reward being based on different factors. Separate rewards may be provided, for example, for compliance with a proximity requirement (e.g., based on a distance between two containers) and for compliance with a requirement for taking medicines. [See, e.g., Specification, page 50, lines 17-25].

Claim **48** recites *providing the at least one party with a first reward based on a distance between the first container and the second container*. Thus, rewarding the at least one party may be based advantageously on a distance between two medicine containers. For example, an insurance company may find it beneficial to monitor whether a party is keeping two containers together or complying with a "proximity requirement." [See, e.g., Specification, page 9,

lines 21-23; page 17, line 30 to page 18, line 3]. Claim **48** is further advantageous in that it also allows for a party to be rewarded a second reward based on an indicator of compliance with the schedule (e.g., a requirement to take medicine).

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

12.3. No Prima Facie Showing of Obviousness of GROUP IX

The Examiner has based a rejection of GROUP IX on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP IX.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

12.3.1. No showing that the References Suggest *providing the at least one party with a first reward based on a distance between the first container and the second container*

The Examiner has not even purported to make any finding of a reward that is determined based on the distance between any two things, much less based on a distance between a first container for storing medicine and a second container for storing medicine.

For at least the reasons stated in Sections 4.5.4 and 4.5.5 above, the cited Andrews and Reber references, alone or in combination, fail to hint even

remotely at the desirability of determining the distance between a first container and a second container for storing medicine.

The Examiner does not even indicate a reference that teaches or suggests *a reward based on a distance between the first container and the second container*, or the desirability of such a feature. Thus, the asserted combination would not provide for all the features of Claim **48**. Applicants respectfully submit that the references do not teach or suggest such a feature, and respectfully traverse any implied assertion that the cited references suggest all types of rewards based on any type of information. Accordingly, Applicants respectfully submit that the cited references do not teach or suggest *providing the at least one party with a first reward based on a distance between the first container and the second container*, as recited in new Claim **48**.

Although Andrews suggests the desirability of determining whether a "security device" is within a specified distance of a "remote unit," the cited references even in combination do such suggest modifying the Reber system to provide for determining the distance between containers for storing medicine. There is no hint of any security concern regarding containers for storing medicine. Even if there were, there is no suggestion that determining the distance between two medicine containers would meet the Examiner's proposed goal of providing such security. For example, if both containers were taken, the proximity-based security would be ineffective.

Furthermore, there is no hint at all in the cited references, in any combination, of rewarding a party based on such a distance. The Examiner does not even attempt to make any such finding. Instead, the Examiner appears to rely

on Brown as suggesting generally all types of rewards based on any type of information. Appellants dispute that such an interpretation is supported by the record.

12.3.2. No Motivation to Modify the References

The Examiner merely asserts that it would have been obvious to provide for the claimed feature "because it would stimulate and discipline patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately." [Second Office Action, page 8]. There is no support in the record for any such motivation, nor would such a motivation lead one skilled in the art to the recited feature.

Appellants have carefully reviewed the record, as well as the Reber, Brown and Andrews references cited by the Examiner, without finding a motivation anywhere in the record that suggests the desirability of combining or modifying the cited references in the manner proposed by the Examiner.

There is nothing presented by the Examiner, or identifiable in the record, to support the Examiner's conclusory statements that it would have been obvious to modify Reber in light of the Andrews and / or Brown systems in order to "stimulate and discipline patients to comply with health management program" in the manner asserted by the Examiner, much less that a reward based on distance between medicine containers would satisfy the proposed motivation.

The Examiner does not indicate any evidence of record that would suggest to one of ordinary skill that determining the distance between two devices is at all relevant to determining compliance with a "health management program,"

"stimulating patients," much less that determining a distance between two medicine containers (or rewarding at least one party based on such a distance) would "stimulate patients to comply," or somehow assist in the treatment of patients in the Reber system, as proposed by the Examiner.

The Examiner provides no reasoned explanation as to why the asserted motivations, even if supported in the record, would have led one having ordinary skill in the art to provide for the claimed features in particular.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber, Andrews and/or Brown would be advantageous. The Examiner does not provide any reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **48**. Applicants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews and/or Brown use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Thus the Examiner has not shown a motivation in the prior art of record to combine the references in any manner that renders any claim of GROUP IX obvious. Accordingly, Appellants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness of independent Claim **48**. The rejection fails for at least this reason.

12.3.3. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP IX.

For at least these reasons, all of the claims of GROUP IX are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

13. GROUP X

GROUP X includes dependent Claim **49**.

All of the claims of GROUP X depend (directly or indirectly) from independent Claim **39** (GROUP VII). Thus, all of the claims of GROUP X are patentable for the same reasons that the claims of GROUP VII are patentable.

The rejection of the claims of GROUP X are further flawed because the Examiner has erroneously concluded that a claim depending from a non-statutory independent claim is *per se* non-statutory subject matter.

The rejection of the claims of GROUP X is further flawed because the Examiner has not made a *prima facie* case of obviousness:

- the Examiner has not shown the limitation of *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine* is disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without an adequate motivation supported by the record for making the proposed combinations.

13.1. Claim 49

Claim **49** includes all of the limitations of independent Claim **39** (GROUP VII), from which Claim **49** depends.

Claim **49** further includes penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine.

13.2. Advantages of Claim 49

The embodiment of Claim **49** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **49** are discussed above in Section 10.2 on page 108 with respect to Claim **39**, from which Claim **49** depends.

Claim **49** is further advantageous in that it provides for *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine.* Thus, some embodiments allow for a patient to be penalized for non-compliance with a schedule. [See, e.g., Specification, page 50, lines 14-16]. The threat of a penalty may be useful in encouraging compliance, in addition to or in lieu of the possibility of a reward for compliance.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

13.3. The Claims of GROUP X are Statutory

Like Claim **4** (GROUP II) (discussed in Section 5.3 on page 66), Claim **49** was merely listed as being rejected under § 101. No other discussion of the subject matter of Claim **49** was provided. The arguments made in Section 5.3 on page 66 with respect to the failure of the Examiner to consider the scope of dependent claims (by erroneously concluding that claims dependent from a non-statutory independent claim must be non-statutory) are equally applicable to the claims of GROUP X.

The terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable. The proper legal standard for statutory subject matter was not applied to the rejected claims.

The Examiner has failed to evaluate the patentability of the claims of GROUP X under § 101 at all. The rejection is therefore arbitrary.

The claims of GROUP X produce a useful, concrete and tangible result. For at least the reasons stated with respect to Claim **39** (GROUP VII) in Section 10.3.2 on page 109, Claim **49** meets the proper legal standard for statutory subject matter—it produces a useful, concrete and tangible result.

Also, the claims of GROUP X include the feature of *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine.* Thus, the claims of GROUP X allow for an entity, such as an insurance company, to provide a negative incentive for a party to comply with a medicine schedule. Penalizing thus results in a useful, concrete and tangible result – a penalty to a party that may encourage that party to comply in the future.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP X is non-statutory.

13.4. No Prima Facie Showing of Obviousness of GROUP X

The Examiner has based a rejection of GROUP X on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP X.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

13.4.1. No showing that the References Suggest *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine*

Applicants respectfully traverse the Examiner's assertion that it would have been obvious to modify the proposed combination of Reber, Andrews and Brown in light of Daansen to provide for all of the features of Claim **49**. [Second Office Action, pages 9-10].

The Examiner has provided no reasoned finding that a feature of *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine* is provided for in the prior art.

As the Examiner states, Daansen describes "wherein employers may be fined if employees do not comply with Food Code regulations" for employee hand washing. [Second Office Action, page 9].

Clearly, Daansen is devoid of any hint or suggestion of complying with a schedule for taking medicine. The description of the Food Code in Daansen does not even remotely suggestion medicine or taking medicine. The Examiner does not assert otherwise.

The Examiner, therefore, must be relying on Daansen as teaching penalizing any party based on failure to comply with any requirement related to health. The Daansen reference cannot support any such interpretation, and the Examiner has not provided any evidence that one skilled in the art would have interpreted Daansen as suggesting anything other than that failure to comply with the Food Code specifically may be penalized.

Accordingly, the Examiner has failed even to assert any teaching or suggestion in the prior art of penalizing a party if the party has not complied with a schedule for taking medicine.

13.4.2. No Motivation to Modify the Cited References

The Examiner's asserted motivation to provide for such a feature is a conclusory statement that the Examiner's proposed combination of Reber, Andrews, Brown and Daansen would be advantageous. The Examiner merely asserts that it would have been obvious to provide for the claimed feature "because it would discipline patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the

patients more accurately." [Second Office Action, pages 9-10]. There is no support in the record for any such motivation, nor would such a motivation lead one skilled in the art to the recited feature.

Appellants have carefully reviewed the record, as well as the Reber, Brown, Andrews and Daansen references cited by the Examiner, without finding a motivation anywhere in the record that suggests the desirability of combining or modifying the cited references in the manner proposed by the Examiner.

There is nothing presented by the Examiner, or identifiable in the record, to support the Examiner's conclusory statements that it would have been obvious to modify Reber in light of the Daansen, Andrews and / or Brown systems in order to "discipline patients to comply with health management program" in the manner asserted by the Examiner, much less that a reward based on distance between medicine containers would satisfy the proposed motivation.

The Examiner does not indicate any evidence of record that would suggest to one of ordinary skill that penalizing a party for failure to comply with a medicine schedule is at all relevant to "disciplining patients" to comply with a "health management program."

The Examiner provides no reasoned explanation as to why the asserted motivation, even if supported in the record, would have led one having ordinary skill in the art to provide for the claimed feature in particular.

The Examiner does not provide a reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of any of the claims of GROUP X. For example, the Examiner does not provide a reasoned explanation as to how the

knowledge that employers may be fined if employees do not comply with Food Code regulations for hand washing would have led one of ordinary skill to modify the Reber system to provide for penalizing a party for failure to comply with a medicine schedule, much less for *charging the at least one party for at least a portion of a treatment of an illness*.

For instance, Daansen is devoid of a hint or suggestion of a medicine schedule, and Reber, Brown, Andrews and Daansen are devoid of a suggestion of the desirability of penalizing a party for failure to comply with a medicine schedule. There is nothing in either Reber, Brown, Andrews and Daansen that suggests the applicability of Food Code regulations regarding hand washing to taking a prescription medicine, much less the desirability of making an employer liable for an employee's (or any other party's) failure to comply with a medicine schedule.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber, Daansen, Andrews and/or Brown would be advantageous. The Examiner does not provide any reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **49**. Applicants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews and/or Brown use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Applicants respectfully submit that the cited references do not teach or suggest *penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine* as recited in Claim **49**, or a motivation for providing for any such feature.

For at least this reason, the Examiner has not presented a *prima facie* case of obviousness of GROUP X.

13.4.3. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP X.

For at least these reasons, all of the claims of GROUP X are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

14. GROUP XI

GROUP XI includes dependent Claim **50**.

All of the claims of GROUP XI depend (directly or indirectly) from independent Claim **39** (GROUP VII) and Claim 49 (GROUP X). Thus, all of the claims of GROUP XI are patentable for the same reasons that the claims of GROUP VII and GROUP X are patentable.

The rejection of the claims of GROUP XI is further flawed because the Examiner has not made a *prima facie* case of obviousness:

- the Examiner has not even attempted to show the limitation in which *penalizing the at least one party* comprises *charging the at least one party for at least a portion of a treatment of an illness resulting at least in part from non-compliance with the schedule* is disclosed or suggested by any reference (or combination of references).

14.1. Claim 50

Claim **50** includes all of the limitations of independent Claim **39** (GROUP VII) and Claim **49** (GROUP X), from which Claim **50** depends.

Claim **50** further specifies that penalizing the at least one party comprises charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine.

14.2. Advantages of Claim 50

The embodiment of Claim **50** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **50** are discussed above in Section 10.2 on page 108 with respect to Claim **39** and in Section 13.2 on page 131 with respect to Claim **49**, from which Claim **50** depends.

Claim **50** is further advantageous in that it provides for *penalizing the at least one party* in a particular way: *charging the at least one party for at least a portion of a treatment of an illness*. Such a penalty may be particular useful in encouraging compliance with a schedule for taking medicine, as the patient is likely to want to avoid even a portion of the potential cost of treating any illness.

Further, Claim **50** advantageously specifies that *the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine*. Thus, some embodiments allow for a patient to be charged for an illness that resulted (at least in part) from the party's failure to comply with a schedule. [See, e.g., Specification, page 50, lines 25-29]. Imposing such a penalty is likely to reduce the likelihood that participants in the system will fail to comply.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

14.3. The Claims of GROUP XI are Statutory

Like Claim **4** (GROUP II) (discussed in Section 5.3 on page 66), Claim **50** was merely listed as being rejected under § 101. No other discussion of the subject matter of Claim **50** was provided. The arguments made in Section 5.3 on page 66 with respect to the failure of the Examiner to consider the scope of dependent claims (by erroneously concluding that claims dependent from a non-statutory independent claim must be non-statutory) are equally applicable to the claims of GROUP XI.

The terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable. The proper legal standard for statutory subject matter was not applied to the rejected claims.

The Examiner has failed to evaluate the patentability of the claims of GROUP XI under § 101 at all. There is no discussion at all, for example, as to why *charging a party* is an "abstract idea" under the Examiner's improper standard. The rejection is therefore arbitrary.

The claims of GROUP XI produce a useful, concrete and tangible result. For at least the reasons stated with respect to Claim **39** (GROUP VII) in Section 10.3.2 on page 109, Claim **50** meets the proper legal standard for statutory subject matter—it produces a useful, concrete and tangible result.

Also, the claims of GROUP XI include the feature of *charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine.* Thus, the claims of

GROUP XI allow for an entity, such as an insurance company, to provide a negative incentive for a party to comply with a medicine schedule, charging the party for at least a portion of an illness resulting at least in part on his failure to comply. Charging thus results in a useful, concrete and tangible result – a penalty corresponding to the result of a failure to comply.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP XI is non-statutory.

14.4. No Prima Facie Showing of Obviousness of GROUP XI

The Examiner has based a rejection of GROUP XI on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP XI.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

14.4.1. No showing that the References Suggest *charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine*

Applicants respectfully traverse the Examiner's assertion that it would have been obvious to modify the proposed combination of Reber, Andrews and Brown

in light of Daansen to provide for all of the features of Claim **49**. [Second Office Action, pages 9-10].

The Examiner has provided no reasoned finding that a feature of *charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine* is provided for in the prior art.

As the Examiner states, Daansen describes "wherein employers may be fined if employees do not comply with Food Code regulations" for employee hand washing. [Second Office Action, page 9].

Clearly, Daansen is devoid of any hint or suggestion of complying with a schedule for taking medicine. The description of the Food Code in Daansen does not even remotely suggestion medicine or taking medicine. The Examiner does not assert otherwise.

The Examiner, therefore, must be relying on Daansen as teaching penalizing any party based on failure to comply with any requirement related to health. The Daansen reference cannot support any such interpretation, and the Examiner has not provided any evidence that one skilled in the art would have interpreted Daansen as suggesting anything other than that failure to comply with the Food Code specifically may be penalized.

Accordingly, the Examiner has failed even to assert any teaching or suggestion in the prior art of penalizing a party if the party has not complied with a schedule for taking medicine.

Even if Daansen suggested penalizing a party as recited in Claim **50** (which it does not), the Examiner does not even purport that any reference hints at charging a party at least a portion of an illness resulting at least in part from the non-compliance.

Accordingly, the Examiner has failed even to assert any teaching or suggestion in the prior art of charging a party as recited in Claim **50**.

14.4.2. No Motivation to Modify the Cited References

For at least the reasons stated with respect to Claim **49** (GROUP X), from which Claim **50** depends, the Examiner has failed to indicate a motivation to combine the cited references in a manner that provides for all of the claimed features of Claim **50**.

There is nothing in either Reber, Brown, Andrews or Daansen that even remotely suggests *charging the at least one party for at least a portion of a treatment of an illness*.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber, Daansen, Andrews and/or Brown would be advantageous. The Examiner does not provide any reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **50**. Applicants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews and/or Brown use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Applicants respectfully submit that the cited references do not teach or suggest *charging the at least one party for at least a portion of a treatment of an illness, in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine* as recited in Claim **50**, or a motivation for providing for any such feature.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP XI.

For at least these reasons, all of the claims of GROUP XI are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

15. GROUP XII

GROUP XII includes independent Claim **51**.

The rejection of GROUP XII is flawed because the Examiner has not made a prima facie case that any claim of GROUP XII is directed to non-statutory subject matter:

- the Examiner erroneously believes that if a claimed step may be performed mentally, the claim as a whole must be non-statutory subject matter; and
- contrary to law, the Examiner applies a novel, unspecified and unsupported legal requirement that a claim must recite a "limitation in the technological arts."

The rejection of GROUP XII is flawed because the Examiner has not made a prima facie case of indefiniteness:

- contrary to law, the Examiner's rejection apparently lies on the mere fact that the Examiner finds the scope of the claims is broad; and
- the Examiner has made no reasoned findings as to why one of ordinary skill would find the scope of any claim is unreasonably unclear when read, as required, in light of the specification.

The rejection of GROUP XII is flawed because the Examiner has not made a prima facie case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP XII to be disclosed or suggested by any reference (or combination of references); and

- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP XII cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP XII obvious.

15.1. Independent Claim 51

Claim **51** is directed to a method comprising a step for obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period. The method also includes a step for rewarding a party based on the information.

15.2. Advantages of Claim 51

The embodiment of Claim **51** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

The advantages of Claim **51** are discussed with respect to Claim **38** (GROUP VI) in Section 9.2 on page 102.

15.3. The Claims of GROUP XII are Statutory

The proper legal standard for statutory subject matter was not applied to the rejected claims. In fact, applying the proper legal standard demonstrates that all claims are directed to statutory subject matter.

In addition, the terseness of the rejection and lack of any analysis renders the rejection hopelessly vague and unreviewable.

15.3.1. The Basis for the Rejection

As best as Appellants understand the rejection of the claims of GROUP XII as being directed to non-statutory subject matter, the basis for the rejection is the same for all the rejected claims. [See Section 4.3.1 on page 27; Second Office Action, page 2].

15.3.2. The Claims Meet the Standard for Statutory Subject Matter

The proper legal standard for statutory subject matter is provided in Section 4.3.2 on page 28.

The claims of GROUP XII produce a useful, concrete and tangible result.

The claims of GROUP XII include the feature of *rewarding a party*. Thus, the claims of GROUP XII allow for an entity, such as an insurance company, to

provide a benefit to a party. Rewarding thus results in a useful, concrete and tangible result – a benefit to a party that may be used, for example, as an incentive to encourage compliance with a requirement (e.g., a medicine schedule, a proximity requirement).

The claims of GROUP XII also include the features of *obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period* and *rewarding a party based on this obtained information.* Thus, the claims of GROUP XII allow for an entity, such as an insurance company, to determine whether medicine containers were able to communicate during a period, and providing a reward based on such information. [See, e.g., Specification, page 10, line 21-26; page 36, line 27 to page 37, line 31].

Obtaining such information thus results in a useful, concrete and tangible result – obtaining information that may be relied upon by, for example, an insurance company, in providing a reward to the party. The processes claimed can by no stretch of the imagination be classified as "abstract ideas," and are thus properly defined statutory processes.

It is also worth noting that the requirement for a "useful invention" is to be evaluated for the invention, and is not dependent on the breadth of the claims. Thus, if one species of an invention claimed as a genus is found to be "useful", utility for the genus is established. Raytheon Co. v. Roper Corp., 724 F.2d 951, 958, 220 USPQ 592, 598 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) ("When a properly claimed invention meets at least one stated objective, utility

under § 101 is clearly shown."). Utility is to be evaluated in a simple "yes" or "no" fashion (i.e., does the invention as claimed possess or not possess utility). There is no subjective test for "utility" that must be deemed to be commensurate with the breadth of the claims being sought to be patented.

Moreover, the scope of the claims as presented encompasses a variety of specific implementations of the claimed processes. Certain of these embodiments implicate the use of processors and / or containers that are capable of communication in the processes. Such container- and device-based species clearly fall within the broader generic definition of the claimed processes. Given that utility for a genus may be established through a recitation of utility of a species within that genus, a rejection that the generically claimed processes lack utility is clearly improper.

15.3.3. The Examiner Applied a Test Which is Contrary to Law

As discussed in Section 4.3.4 on page 33, there is no authority requiring claims to "recite a limitaion [sic] in the technological arts," whatever that may mean. The Examiner does not indicate any relevant case law that puts forth such a test.

Also, as discussed in Section 4.3.4 on page 33, a claim need not preclude an embodiment performed mentally, and a claim need not recite "interaction of a physical structure.

15.3.4. The Examiner Has Not Even Applied His Test to GROUP XII

Other than the conclusory statement that Claim **51** fails to satisfy the standard(s) described above, there is no explanation of why the particular claims of GROUP XII do not "recite a limitaion [sic] in the technological arts."

The Examiner has not set forth in the record any factual findings, such as:

- how various claim terms of Claim **51** have been construed (e.g., *container for storing a first medicine, obtaining information that identifies whether at least one container was able to communicate with at least one other container, rewarding a party*); and
- what exactly constitutes "a limitaion [sic] in the technological arts."

There is no reasoned finding that any pending claim, considered as a whole, is an "abstract idea" and / or fails to recite "interaction with a physical structure." Thus, the Examiner has failed even to apply correctly the erroneous standard asserted.

Absent any findings, the result of the test purportedly applied cannot be evaluated, and must be considered arbitrary.

For all of the above reasons, the proper legal standard for statutory subject matter was not applied to the rejected claims, which are all directed to statutory subject matter. Thus the Examiner has not provided a *prima facie* case that any claim of GROUP XII is nonstatutory.

15.4. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP XII. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XII are definite.

Claim **51** includes terms that are identical or substantially similar to terms that the Examiner found "confusing" or "not clear" in Claim **34**. [Second Office Action, page 2]. The arguments made in Section 7.4 on page 83 with respect to those terms and to the Examiner's failure to make appropriate findings or establish a *prima facie* case of indefiniteness are equally applicable to Claim **51**.

In particular, the terms *container for storing...medicine* and *obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period* are all reasonably clear based on their plain meanings and also when considered in light of the Specification.

Thus, the proper legal standard for definiteness was not applied to any claim of GROUP XII. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XII are definite.

Accordingly, the Examiner has not set forth a prima facie case of indefiniteness of any claim of GROUP XII.

15.5. No Prima Facie Showing of Obviousness of GROUP XII

The Examiner has based a rejection of GROUP XII on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP XII.

Claim **51** contains limitations that are substantially similar to those of Claim **38** (GROUP VI).

The Examiner has failed to establish a prima facie case of obviousness with respect to Claim **51** for at least the reasons stated with respect to Claim **38** in Section 9.4 above and in Section 7.5 above (with respect to Claim **34**). .

For at least these reasons, all of the claims of GROUP XII are patentable in view of the cited references.

SEPARATE ARGUMENT OF PATENTABILITY

16. GROUP XIII

GROUP XIII includes independent Claim **26**.

The rejection of GROUP XIII is flawed because the Examiner has not made a *prima facie* case of indefiniteness of any term and, contrary to law, the Examiner's rejection apparently lies on the mere fact that an apparatus claim includes functional language.

GROUP XIII includes limitations substantially similar to those in Claim **3** (GROUP I) and the § 103 rejection is flawed for at least the same reasons provided with respect to GROUP I in Section 4.5 on page 47. The Examiner has not made a *prima facie* case of obviousness.

16.1. Independent Claim 26

Claim **26** is directed to an apparatus comprising a communication device, a processor and a computer program. The computer program is executable by the processor so as to direct the processor to receive a signal and to determine, based at least in part on the received signal, whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine.

16.2. Advantages of Claim 26

The embodiment of Claim **26** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

The advantages of Claim **26** are discussed with respect to Claim **3** in Section 4.2 on page 25.

16.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP XIII. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XIII are definite.

Claim **26** includes terms that are identical or substantially similar to terms that the Examiner found "confusing" or "not clear" in Claim **3**. [Second Office Action, page 2]. The Examiner does not explicitly reject Claim **26** for including terms such as *receiving, signal, receiving a signal, determining,* or *container for storing...medicine*. Nonetheless, Appellants address any rejection that was intended based on those terms.

The arguments made in Section 4.4 on page 36with respect to those terms and to the Examiner's failure to make appropriate findings or establish a *prima facie* case of indefiniteness are equally applicable to Claim **26**. In summary, the terms *container for storing...medicine*, *receiving a signal*, and *determining* are all

reasonably clear based on their plain meanings and also when considered in light of the Specification.

The Examiner also asserts that Claim **26** "confusing, because [it refers] to an apparatus while describing method steps." [Second Office Action, page 3].

Appellants do not understand this rationale at all. Appellants respectfully request additional guidance from the Examiner in the Examiner's Answer.

Appellants submit that the Examiner's cursory rejection of an apparatus claim for including functional language is contrary to law. There is no *per se* rule that an apparatus claim is indefinite if it includes functional language.

To the contrary, Claim **26** clearly recites characteristics of the computer program element of the claimed apparatus. In particular, the program is executable by the recited processor so as to direct the processor to perform recited functions. Defining subject matter by the function it is capable of performing, and defining computer program elements by the functionality they may impart to a processor when executed, are conventional drafting techniques. This would easily be understood by one skilled in the art.

Of course, there is nothing intrinsically wrong in defining something by what it does rather than by what it is. See In re Hallman, 655 F.2d 212 (C.C.P.A. 1981). The reciting of functional language in an apparatus claim does not automatically render the claim indefinite. Claim **26** is reasonably defined by both what it is (an apparatus with specified elements) and by what the program of that apparatus is capable of doing (directing the recited processor to perform the recited functionality).

The Examiner provides no reasoned finding that Appellants' claim would be "confusing" to one skilled in the art, but has merely stated a conclusion.

Accordingly, the Examiner has not set forth a *prima facie* case of indefiniteness of any claim of GROUP XIII.

16.4. No Prima Facie Showing of Obviousness of GROUP XIII

The Examiner has based a rejection of GROUP XIII on a view of the prior art that is unsupported by the record. The Examiner has not provided any evidence supporting allegations about the scope and content of the prior art. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP XIII.

GROUP XIII includes limitations substantially similar to those in Claim **3** (GROUP I) and the § 103 rejection is flawed for at least the same reasons provided with respect to GROUP I in Section 4.5 on page 47. The Examiner has failed to provide substantial evidence of a suggestion in the prior art to provide for a container for storing medicine capable of communicating wirelessly with another such container, much less determining whether two such containers were positioned so as to communicate.

The Examiner has not made a *prima facie* case of obviousness of any claim of GROUP XIII.

SEPARATE ARGUMENT OF PATENTABILITY

17. GROUP XIV

GROUP XIV includes dependent Claim **27**.

All of the claims of GROUP XIV depend from independent Claim **26** (GROUP XIII). Thus, all of the claims of GROUP XIV are patentable for the same reasons that the claims of GROUP VII are patentable.

The rejection of the claims of GROUP XIV is further flawed because the Examiner has not made a *prima facie* case that a feature generally directed to *determining compliance of a party with a schedule for taking two medicines* is indefinite.

17.1. Claim 27

Claim **27** includes all of the limitations of independent Claim **26** (GROUP XIII), from which Claim **27** depends.

Claim **27** further includes program code executable by the processor so as to direct the processor to determine if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

17.2. Advantages of Claim 27

The embodiment of Claim **27** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either

alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **27** are discussed above in Section 16.2 on page 155 with respect to Claim **26**, from which Claim **27** depends.

Claim **27** is further advantageous in that it provides for program code that may be executed by the processor so as to direct the processor to *determine if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.* For example, an insurance company may monitor at least one party's compliance with a requirement to take multiple medicines and / or at least one party's compliance with a requirement that two or more medicine containers be kept within a certain distance or range of one another (e.g., a "proximity requirement"). Claim **27** advantageously provides the apparatus with the ability to determine whether, based on the same received signal, two containers were positioned so as to communicate and determining whether at least one party complied with a schedule for taking two medicines. [Specification, page 8, lines 22-27].

17.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP XIV. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XIV are definite.

The Examiner asserts that "'determining a level to which a party complied with a medicine schedule based on the information (signal)' is confusing, because

it is not indicated if the party took this medicine." [Second Office Action, page 2].

Although the Examiner does not explicitly reject Claim **27** on this basis, Claim **27** does recite *determine if at least one party has complied with a schedule for taking the first medicine and the second medicine.* Accordingly, Appellants address any possible rejection of Claim **27** on that basis.

Appellants do not understand at all the reasoning behind the Examiner's finding that determining compliance with a schedule for taking medicine is "confusing because it is not indicated if the party took this medicine."

For at least the reasons stated with respect to Claim **12** in Section 6.4 on page 73, Appellants submit that *determining if a party has complied with a schedule for taking medicine* is reasonably clear to one skilled in the art, on its face or when read, as required, in light of the Specification. The law regarding § 112(P2) asks no more.

Also, the Examiner has not provided any evidence to establish the step is indefinite. The Examiner has made no finding that the ordinary meaning of determining compliance with a schedule for taking medicine is fatally unclear.

Appellants submit that the Examiner's cursory rejection of an apparatus claim for including functional language is contrary to law, for at least the reasons stated with respect to Claim **26** in Section 16.3 on page 155. The Examiner has made no reasoned finding explaining why one skilled in the art would find the recited language "confusing" or otherwise unreasonably unclear.

Accordingly, for at least those reasons, the Examiner has failed to establish a *prima facie* case of indefiniteness of any claim of GROUP XIV.

Accordingly, the claims of GROUP XIV should be allowed.

SEPARATE ARGUMENT OF PATENTABILITY

18. GROUP XV

GROUP XV includes independent Claim **28**.

The rejection of GROUP XV is flawed because the Examiner has not made a *prima facie* case of indefiniteness of any term and, contrary to law, the Examiner's rejection apparently lies on the mere fact that an apparatus claim includes functional language.

The rejection of GROUP XV is flawed because the Examiner has not made a *prima facie* case of obviousness:

- the Examiner has not shown all limitations of any claim of GROUP XV to be disclosed or suggested by any reference (or combination of references); and
- the rejection is based on improper combinations of the references with unsupported subject matter and without adequate motivation in the prior art for making the proposed combinations.

Further, the claims of GROUP XV cannot be deemed obvious in light of the references of record, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. The prior art of record also does not contain any proper motivation to combine or modify the references in any way that renders the claims of GROUP XV obvious.

18.1. Independent Claim 28

Claim **28** is directed to a system for rewarding at least one party for complying with a schedule for taking a first medicine and a second medicine.

The system comprises a first container adapted to store a first medicine and a second container adapted to store a second medicine and to communicate with the first container.

The system further comprises a compliance monitoring device. The compliance monitoring device is adapted to communicate with at least the first container and to determine, based on at least a communication with the first container, whether the first container is positioned so as to communicate with the second container. The compliance monitoring device is further adapted to generate data based at least in part on that determination and to output the generated data.

The system further comprises a server that is adapted to receive the data output by the compliance monitoring device and to reward at least one party based on the received data.

18.2. Advantages of Claim 28

The embodiment of Claim **28** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Some of the advantages of Claim **28** are discussed with respect to Claim **3** in Section 4.2 on page 25.

For example, Claim **28** is advantageous in providing for a compliance monitoring device and for two containers adapted to both store medicine and to communicate with one another. For instance, a compliance monitoring device capable of determining whether a first container is positioned so as to communicate with a second container is advantageous in allowing an entity (e.g., an insurance company) to track compliance of a patient with a requirement that two containers are kept within a certain distance or range of one another (e.g., a proximity requirement). [See, e.g., Specification, page 9, lines 20-23; page 36, line 27 to page 37, line 1].

Claim **28** is also advantageous in providing a system in which the compliance monitoring device can generate data based on whether the containers were positioned so as to communicate with one another and to output the data (e.g., as a code). Thus, in some embodiments, the system allows for information about the proximity of the container to be transmitted to and received by a server. Claim **28** further allows for the server to reward at least one party (e.g., a patient) based on the received data. Thus, some embodiments provide for rewarding a patient based on the patient's compliance with a requirement to keep the containers positioned so that they are able to communicate.

18.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP XV. Accordingly, the Examiner has not presented a *prima facie* case

that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XV are definite.

Claim **28** includes terms that are similar to terms that the Examiner found "confusing" or "not clear" in Claim **3**. [Second Office Action, page 2]. The Examiner does not explicitly reject Claim **28** for including terms such as *determining whether a first container is positioned so as to communicate with the second container*, *communicate with at least one container*, *receive the data output by the compliance monitoring device*, or *container adapted to store...medicine*. Nonetheless, Appellants address any rejection that was intended based on those terms.

The arguments made in Section 4.4 on page 36with respect to those terms and to the Examiner's failure to make appropriate findings or establish a *prima facie* case of indefiniteness are equally applicable to Claim **28**. In summary, all of the language of Claim **28** is reasonably clear based on its plain meaning and also when considered in light of the Specification.

The Examiner also asserts that Claim **28** "confusing, because [it refers] to an apparatus while describing method steps." [Second Office Action, page 3].

Appellants do not understand this rationale at all. Appellants respectfully request additional guidance from the Examiner in the Examiner's Answer.

Appellants submit that the Examiner's cursory rejection of an apparatus claim for including functional language is contrary to law. There is no *per se* rule that an apparatus claim is indefinite if it includes functional language.

To the contrary, Claim **28** clearly recites characteristics of the capabilities of the containers, of the compliance monitoring device, and of the server of the

claimed apparatus. Claiming subject matter by the function it is adapted to or capable of performing is a conventional drafting technique. This would easily be understood by one skilled in the art.

Of course, there is nothing intrinsically wrong in defining something by what it does rather than by what it is. See In re Hallman, 655 F.2d 212 (C.C.P.A. 1981). The reciting of functional language in an apparatus claim does not automatically render the claim indefinite. Claim **26** is reasonably defined by both what it is (an apparatus with specified elements) and by what the program of that apparatus is capable of doing (directing the recited processor to perform the recited functionality).

The Examiner provides no reasoned finding that Appellants' claim would be "confusing" to one skilled in the art, but has merely stated an unsupported conclusion.

Accordingly, the Examiner has not set forth a *prima facie* case of indefiniteness of any claim of GROUP XV.

18.4. No Prima Facie Showing of Obviousness of GROUP XV

The Examiner has based a rejection of GROUP XV on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP XV.

The claims of GROUP XV are not obvious in light of the cited references for reasons stated with respect to Claim **3** (GROUP I) in Section 4.5 on page 47. In particular, there is no suggestion of a container for storing medicine adapted to

communicate with another such container. Further, there is no suggestion of determining whether a container was positioned so as to be able to communicate with another container

Further, the Examiner does not even purport to have found in the prior art a reference suggesting a *compliance monitoring device that is adapted to generate data based on such a determination*, as generally recited in Claim **28**. As there is no suggestion in the cited references of such functionality, there can be no suggestion of *a compliance monitoring device* adapted to make any such determination, much less to generate data based on such a determination, as recited in Claim **28**.

Further, there is no suggestion in the cited references of a server adapted to receive the generated data and to *reward at least one party based on the data about whether a container was positioned so as to communicate with another container*. The cited references do not teach or suggest rewarding a party based on such information, nor is there any suggestion of the desirability of providing for any such features. To the extent that the Examiner is relying upon Brown as teaching any reward based on any type of information, Appellants traverse any such interpretation of Brown, which is unsupported by the record

Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of any claim of GROUP XV.

Accordingly, for at least those reasons, the claims of GROUP XV are patentable.

SEPARATE ARGUMENT OF PATENTABILITY

19. GROUP XVI

GROUP XVI includes dependent Claim **29**.

All of the claims of GROUP XVI depend from independent Claim **28** (GROUP XV). Thus, all of the claims of GROUP XVI are patentable for the same reasons that the claims of GROUP VII are patentable.

The rejection of the claims of GROUP XVI is further flawed because the Examiner has not made a *prima facie* case that a feature generally directed to *determining a level to which the at least one party has complied with a schedule for taking medicines* is indefinite.

19.1. Claim 29

Claim **29** includes all of the limitations of independent Claim **28** (GROUP XV), from which Claim **29** depends.

Claim **29** further includes wherein the server is further adapted to determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received data.

19.2. Advantages of Claim 29

The embodiment of Claim **29** provides several advantages not even disclosed or suggested, much less recognized, by the prior art of record (either alone or in combination). These advantages render the claimed subject matter nonobvious over any cited reference(s).

Several advantages of Claim **29** are discussed above in Section 18.2 on page 163with respect to Claim **28**, from which Claim **29** depends.

The system of Claim **29** is also advantageous in that it provides for a server adapted to *determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine.* For example, an insurance company may monitor at least one party's compliance with a schedule for taking multiple medicines. Claim **29** advantageously provides for determining, based on data received from the compliance monitoring device regarding whether two containers were positioned so as to communicate, whether at least one party complied with a schedule for taking two medicines. [Specification, page 8, lines 22-27].

The system of Claim **29** is also advantageous in that it provides for rewarding the at least one party based on the determined level of compliance. For example, in some embodiments, to provide a "positive incentive" for a party to comply to a medicine schedule, embodiments of the invention allow an insurance company, a doctor, a pharmacist or any other relevant entity to conveniently monitor the party's compliance to the medicine schedule (e.g., by monitoring the proximity of two or more medicine containers that may communicate with one another), and to reward the party based on a level to which the party complies

with the medicine schedule. [See, e.g., Specification, page 12, lines 3-8; page 21, line 29 to page 22, line 4; page 49, line 17 to page 50, line 14].

19.3. The Claims are Definite under § 112(P2)

The proper legal standard for definiteness was not applied to any claim of GROUP XVI. Accordingly, the Examiner has not presented a *prima facie* case that any claim is indefinite. In fact, applying the proper legal standard demonstrates that all claims of GROUP XVI are definite.

The Examiner asserts that "'determining a level to which a party complied with a medicine schedule based on the information (signal)' is confusing, because it is not indicated if the party took this medicine." [Second Office Action, page 2].

Although the Examiner does not explicitly reject Claim **29** on this basis, Claim **29** does recite *determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine.* Accordingly, Appellants address any possible rejection of Claim **29** on that basis.

For at least the reasons stated with respect to Claim **34** in Section 7.4 on page 83, Appellants submit that *determining a level to which at least one party has complied with a schedule for taking medicine* is reasonably clear to one skilled in the art, on its face or when read, as required, in light of the Specification. The law regarding § 112(P2) asks no more.

Also, the Examiner has not provided any evidence to establish the language is indefinite. The Examiner has made no finding that the ordinary meaning of

determining a level of compliance with a schedule for taking medicine is fatally unclear.

Appellants also submit that the Examiner's cursory rejection of an apparatus claim for including functional language is contrary to law, for at least the reasons stated with respect to Claim **26** in Section 16.3 on page 155. The Examiner has made no reasoned finding explaining why one skilled in the art would find the recited language "confusing" or unreasonably unclear.

Accordingly, for at least those reasons, the Examiner has failed to establish a *prima facie* case of indefiniteness of any claim of GROUP XVI.

19.4. No Prima Facie Showing of Obviousness of GROUP XVI

The Examiner has based a rejection of GROUP XVI on a view of the prior art that is unsupported by the record. Accordingly, the Examiner has not presented a prima facie case of obviousness of GROUP XVI.

The proper legal standard for obviousness and the *prima facie* burden of the Examiner are discussed in Sections 4.5.1 - 4.5.3 above.

19.4.1. No showing that the References Suggest *a server adapted to determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the data received from the compliance monitoring device*

The Examiner has not shown that the cited references, alone or in combination, suggest *a server adapted to determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the data received from the compliance monitoring device*, which data is *based at least in part on whether the first container is positioned so as to communicate with the second container.*

Factual Evidence

The Examiner has made no finding even remotely related to determining compliance with a medicine schedule based on whether a first container was able to communicate with a second container.

The closest the Examiner comes are the following statements:

> Reber et al. and Andrews teach all the limitations [of Claim 34] except a server adapted to: receive the data output by the compliance monitoring device; and reward at least one party based on the received data. Brown teaches a computerized reward system and method for encouraging in a health management program, comprising a server for receiving the compliance data, and wherein a compliance data on individuals is evaluated, and the reward to be given to the compliant individual. (Abstract; column 3, lines 18-60).

[Second Office Action, pages 6-7].

No further reasoning is provided for the Examiner's interpretation of the prior art.

These Findings Have No Support in the Record

Nothing in the Examiner's statements of record approaches substantial evidence in the prior art of the recited features; the statements cannot support a *prima facie* case of obviousness.

In order to establish a *prima facie* case that the combination of Reber, Andrews and Brown provides for all the features of the claims of GROUP XVI, the Examiner must provide substantial evidence that the proposed combination would teach or suggest determining a level of compliance based specifically on data that is based at least in part whether a container for storing medicine was positioned so as to communicate with another such container. The Examiner has not even purported to make any such finding.

The Examiner apparently relies on the proposed combination of Reber and Andrews for teaching all of the features of Claim **29** except *determining a level of compliance with schedule for taking medicine* and *rewarding at least one party based on the level.* For the reasons stated in Sections 4.5.4 and 4.5.5 above, Appellants submit that containers for storing medicine adapted for communication with one another are not taught or suggested by the evidence of record, nor is the determining of whether such containers were positioned so as to communicate.

None of the references teaches or suggests any such information; they cannot suggest determining a level of compliance based on such information.

The cited references are devoid of a hint or suggestion of how the ability of two medicine containers to communicate is at all relevant to a party's compliance with a medicine schedule. As the cited references do not teach or suggest such information, or the desirability of such information, even in combination, the references cannot teach or suggest determining a party's compliance based on such information.

Based on Appellants' understanding of the record, the Examiner relies on Brown and / Reber as somehow suggesting all conceivable bases for determining a level of compliance with a medicine schedule. Appellants dispute that the cited references may be so interpreted. Clearly, Reber suggests only acknowledgement of compliance that is based on a user-initiated action to indicate the user has taken medicine. Brown discloses only determining compliance based on monitored physiological data and / or answers by the user to questions / prompts.

There is no teaching or even suggestion of determining a level of compliance with a medicine schedule based specifically on whether a container for storing medicine was positioned so as to communicate with another container for storing medicine, much less rewarding a party based on a level of compliance that is determined based on data based on such a determination. The Examiner has provided no evidence suggesting otherwise.

19.4.2. No Showing of a Proper Motivation to Modify the References

The Examiner has not shown a motivation in the prior art of record to modify and / or combine the cited references in the manner proposed by the Examiner, or in any other manner that renders the claims obvious.

The proper legal standard for establishing a motivation to modify / combine references is discussed in Section 4.5.5 above. The Examiner has failed to meet this standard.

No Substantial Evidence of a Motivation to Combine or Modify

The Examiner has proposed that one of ordinary skill in the art at the time the invention was made would have modified or combined the purported prior teachings of Andrews, Reber, and Brown As best understood by Appellants, the Examiner asserts the following to be true with respect to Claim **29**:

(a) It would have been obvious to one of ordinary skill in the art to modify a combination of Reber and Andrews in light of Brown to provide for determining a level of compliance with a medicine schedule based on whether two medicine containers were positioned so as to communicate and to provide for rewarding a party based on this level; and

(b) The motivations for (a) would be

(i) to "enhance the capability of the system" and

(ii) "stimulate patients to comply with health management program thereby allowing physicians to determine the best way of treatment for the patients more accurately."

[Second Office Action, page 7].

The Asserted Motivations Are Not Shown in the Cited References

Appellants have carefully reviewed the record, as well as the Reber and Andrews references cited by the Examiner, without finding a motivation anywhere in the record that suggests the desirability of combining or modifying the cited references in the manner proposed by the Examiner.

There is nothing presented by the Examiner, or identifiable in the record, to support the Examiner's conclusory statements that it would have been obvious to modify Reber in light of the Andrews and / or Brown systems in order to (i) "enhance the capability of the system"; or (iii) "stimulate patients to comply with health management program" in the manner asserted by the Examiner.

To "enhance the capability of the system" is a mere conclusory and baseless statement that it is always obvious to improve a prior art system. This is not a proper finding supporting any particular modification. Only Appellants' disclosure suggests that the recited features are advantageous.

The Examiner does not indicate any evidence of record that would suggest to one of ordinary skill that determining the proximity of two devices is at all relevant to determining compliance with a "health management program," "stimulating patients," much less that determining whether two medicine containers are able to communicate (or rewarding based on such a determination) would "enhance the capability," "stimulate patients to comply," or somehow assist in the treatment of patients in the Reber system, as proposed by the Examiner.

The Examiner provides no reasoned explanation as to why the asserted motivations, even if supported in the record, would have led one having ordinary skill in the art to provide for the claimed features in particular.

The Examiner's asserted motivations are thus mere conclusory statements that the Examiner's proposed combinations of Reber, Andrews and/or Brown would be advantageous. The Examiner does not provide any reasoned explanation, based on evidence in the record, as to how one having ordinary skill in the art would have been led to provide for the specific features of independent Claim **34**. Applicants respectfully submit that the Examiner's proposed modifications of Reber in light of Andrews and/or Brown use impermissible hindsight reconstruction absent some real and specific teaching, suggestion, or motivation for the modifications.

Thus the Examiner has not shown a motivation in the prior art of record to combine the references in any manner that renders any claim of GROUP XVI obvious. Accordingly, Appellants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness of independent Claim **34**. The rejection fails for at least this reason.

19.4.3. Level of Skill

Applicable Law

The level of ordinary skill in the art is one of the underlying factual findings in support of an obviousness rejection. Graham v. John Deere Co., 383

U.S. 1, 17, 148 U.S.P.Q. 459, 467, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

The skill level is one component of the inquiry for a suggestion to combine. In re Rouffet, 149 F.3d 1350, 1359 (Fed. Cir. 1998). The level of skill in the art is measured as of the time the invention was made.

Lacking a motivation to combine, there is no prima facie case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998). If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Factual Findings

Though required to do so, the Examiner has not set forth any evidence relating to the level of ordinary skill in the art at the time of invention, and has not even alleged what the level of ordinary skill in the art would be. The rejection fails for at least this reason.

The Examiner has thus failed to establish a *prima facie* case of obviousness of any claim of GROUP XVI.

For at least these reasons, all of the claims of GROUP XVI are patentable in view of the cited references.

CONCLUSION

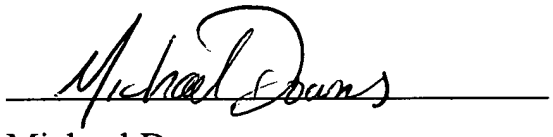
Thus, the Examiner's rejection of the pending claims is improper at least because the Examiner has not provided a proper legal basis for rejecting any claim. Therefore, Appellants respectfully request that the Examiner's rejections be reversed.

If any issues remain, or if there are any further suggestions for expediting allowance of the present application, please contact Michael Downs using the information provided below.

Appellants hereby request any extension of time that may be required to make this Appeal Brief timely. Please charge any fees that may be required for this paper, or credit any overpayment, to Deposit Account No. 50-0271.

Respectfully submitted,

June 14, 2004
Date



Michael Downs
Attorney for Appellants
Registration No. 50, 252
Walker Digital, LLC
mdowns@walkerdigital.com
(203) 461-7292 /voice
(203) 461-7300 /fax

APPENDIX A

CLEAN COPY OF CLAIMS INVOLVED IN THE APPEAL

Claims **3-14, 26-29 and 34-51** are being appealed.

Claims **3, 26, 28, 34, 36, 38, 39 and 51** are independent.

3. (ORIGINAL) A method comprising:

receiving a signal; and

determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal.

4. (ORIGINAL) The method of claim 3 wherein receiving a signal comprises receiving the signal from a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate.

5. (ORIGINAL) The method of claim 4 wherein the device comprises at least one of the first container and the second container.

6. (ORIGINAL) The method of claim 4 wherein receiving the signal from a device that monitors at least an indicator of whether the first container and the second container are positioned so as to wirelessly communicate comprises polling the device.

7. (ORIGINAL) The method of claim 3 wherein receiving a signal comprises receiving a signal from at least one of a representative of a pharmacy, a representative of a medical facility and a party that is to take at least one of the first and the second medicines.

8. (ORIGINAL) The method of claim 3 wherein receiving a signal comprises receiving a code.

9. (ORIGINAL) The method of claim 8 wherein the code is an encrypted code.

10. (ORIGINAL) The method of claim 9 wherein determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal comprises decrypting the encrypted code.

11. (ORIGINAL) The method of 3 wherein determining whether a first container for storing a first medicine was positioned so as to wirelessly communicate with a second container for storing a second medicine based at least in part on the signal comprises determining whether the signal indicates that the first container for storing the first medicine was positioned so as to wirelessly communicate with the second container for storing the second medicine during a pre-determined time period.

12. (ORIGINAL) The method of 3 further comprising determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

13. (ORIGINAL) The method of claim 12 wherein determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal comprises:

receiving first information regarding a prescribed schedule for taking the first medicine and the second medicine;

receiving second information regarding a schedule for taking the first medicine and the second medicine adhered to by the at least one party;

comparing the first information to the second information; and

generating at least an indicator of a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine.

14. (ORIGINAL) The method of claim 13 wherein obtaining first information regarding the first medicine and the second medicine comprises obtaining the first information from at least one of a representative of a pharmacy, a representative of a medical facility and a representative of a manufacturer of at least one of the first and the second medicines.

26. (PREVIOUSLY PRESENTED) An apparatus comprising:

a communication device adapted to receive a signal;

a processor coupled to the communication device, the processor adapted to obtain the signal via the communication device; and

a computer program, the computer program executable by the processor so as to direct the processor to:

receive the signal; and

determine whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine based at least in part on the signal.

27. (ORIGINAL) The apparatus of claim 26 wherein the computer program further includes program code executable by the processor so as to direct the processor to determine if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

28. (ORIGINAL) A system for rewarding at least one party for complying with a schedule for taking a first medicine and a second medicine comprising:

a first container adapted to store a first medicine;

a second container adapted to store a second medicine and to communicate with the first container;

a compliance monitoring device adapted to:

communicate with at least the first container;

determine, based on at least a communication with the first container, whether the first container is positioned so as to communicate with the second container;

generate data based at least in part on whether the first container is positioned so as to communicate with the second container; and

output the data; and

a server adapted to:

receive the data output by the compliance monitoring device; and

reward at least one party based on the received data.

29. (ORIGINAL) The system of claim 28 wherein the server is further adapted to:

determine a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the data received from the compliance monitoring device; and

reward the at least one party based on the level.

34. (PREVIOUSLY PRESENTED) A method for rewarding a party for complying with a medicine schedule comprising:

receiving information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period;

determining a level to which the party complied with a medicine schedule based on the information; and

rewarding the party based on the level.

35. (PREVIOUSLY PRESENTED) The method of claim 34 wherein the information comprises encrypted information.

36. (PREVIOUSLY PRESENTED) A computer program product comprising:

a medium readable by a computer, the computer-readable medium having:

program code adapted to obtain information regarding whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period;

program code adapted to determine a level to which the party complied with a medicine schedule based on the information; and

program code adapted to determine a reward for the party based on the level.

37. (PREVIOUSLY PRESENTED) The computer program product of claim 36, in which the reward comprises a discount on a product.

38. (PREVIOUSLY PRESENTED) An apparatus comprising:

means for obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; and

means for rewarding a party based on the information.

39. (PREVIOUSLY PRESENTED) A method comprising:

receiving a signal from a device that monitors whether a first container for storing a first medicine was positioned so as to communicate with a second container for storing a second medicine; and

determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal.

40. (PREVIOUSLY PRESENTED) The method of claim 39,

in which the received signal indicates whether the first container for storing the first medicine was positioned so as to communicate with the second container for storing the second medicine.

41. (PREVIOUSLY PRESENTED) The method of claim 39,

in which determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal comprises determining whether the first container was positioned so as to communicate with the second container based at least in part on the received signal.

42. (PREVIOUSLY PRESENTED) The method of claim 39 in which determining if at least one party has complied with a schedule for taking the first medicine and the second medicine based at least in part on the received signal comprises:

receiving first information regarding the first medicine and the second medicine;

determining second information regarding the first medicine and the second medicine based on the received signal; and

generating at least an indicator of a level to which the at least one party has complied with a schedule for taking the first medicine and the second medicine based on the first and the second information.

43. (PREVIOUSLY PRESENTED) The method of claim 39, further comprising:

rewarding the at least one party if the at least one party has complied with the schedule for taking the first medicine and the second medicine.

44. (PREVIOUSLY PRESENTED) The method of claim 43, in which rewarding the at least one party comprises:

determining a level to which the at least one party has complied with the schedule for taking the first medicine and the second medicine; and

rewarding the at least one party based on the level.

45. (PREVIOUSLY PRESENTED) The method of claim 43 in which rewarding the at least one party comprises:

providing the at least one party with a list of rewards;

receiving a selection of one of the listed rewards; and

providing the selected reward to the at least one party.

46. (PREVIOUSLY PRESENTED) The method of claim 43, in which rewarding the at least one party comprises:

providing the at least one party with a reward selected by at least one of:

a representative of an insurance company, and

a representative of a medical facility.

47. (PREVIOUSLY PRESENTED) The method of claim 43, in which rewarding the at least one party comprises:

determining a previous level to which the at least one party has complied with the schedule for taking the first medicine and the second medicine;

determining a reward based at least in part on the previous level; and

providing the at least one party with the reward.

48. (PREVIOUSLY PRESENTED) The method of claim 43, in which rewarding the at least one party comprises:

providing the at least one party with a first reward based on a distance between the first container and the second container; and

providing the at least one party with a second reward based on at least one other indicator that the at least one party has complied with the schedule for taking the first medicine and the second medicine.

49. (PREVIOUSLY PRESENTED) The method of claim 39, further comprising:

penalizing the at least one party if the at least one party has not complied with the schedule for taking the first medicine and the second medicine.

50. (PREVIOUSLY PRESENTED) The method of claim 49 in which penalizing the at least one party comprises:

charging the at least one party for at least a portion of a treatment of an illness,

in which the illness results at least in part from the at least one party not complying with the schedule for taking the first medicine and the second medicine.

51. (PREVIOUSLY PRESENTED) A method comprising:

a step for obtaining information that identifies whether at least one first container for storing a first medicine was able to communicate with at least one second container for storing a second medicine during a pre-determined time period; and

a step for rewarding a party based on the information.